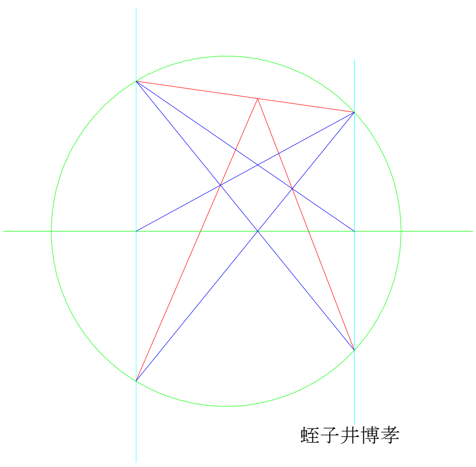
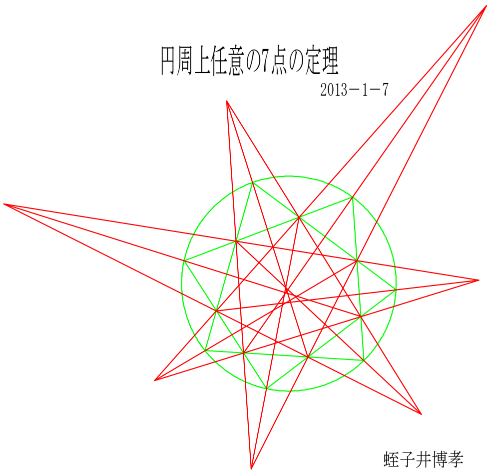
蛭子井博孝

幾何数学 理想と情熱の花

円と中心線に直交な平行線の不思議





幾何数学研究センター
http://gakumon87.com/
http://ebisuihirotaka.net/

アジサイの群れてふさふさ梅雨の雨

数学日記

geoMathe Diary

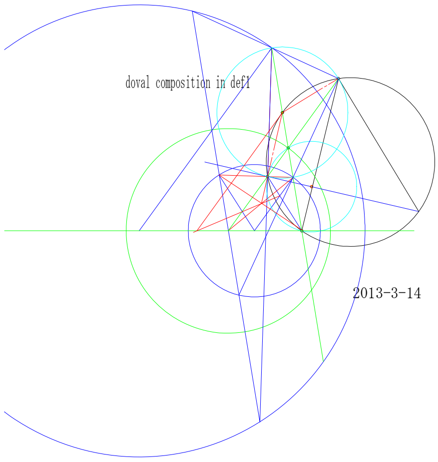
(28th - 39th)

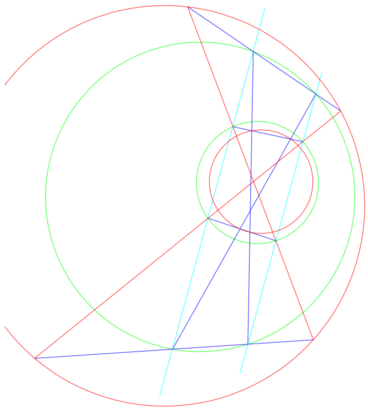
理想と情熱

1-12

蛭子井博孝編

Thank you!!!





(Hex)

卵形線研究センター

http://hoval.blogzine.jp/
http://eh85.blogzine.jp/

はしがき　　　　　理想と情熱

この部は、5 年前の数学日記を再集したもので、古いものである。といっても、数学はいつまでの新鮮さが保てるので、皆さんに、見ていただけたらと想っています。

多くは語らないで、写真を一枚入れます。

この春の最終講演（2018-3-19）ここでした。
発表前日、看板に再会し、ほっとして立つ

数学日記

geoMathe Diary28th

IDEAL and Passion　No.1

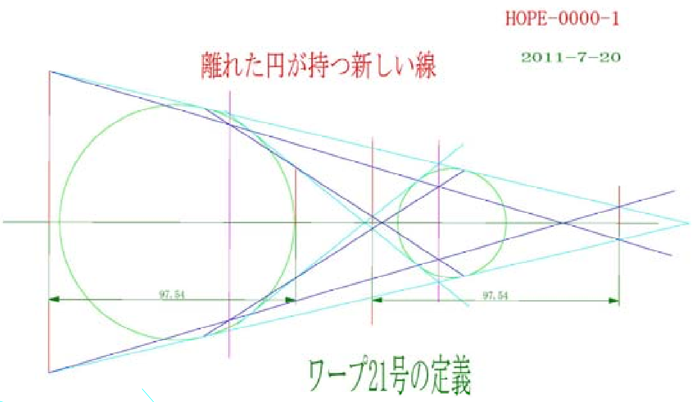
by　Hirotaka Ebisui and Maria Intagliata

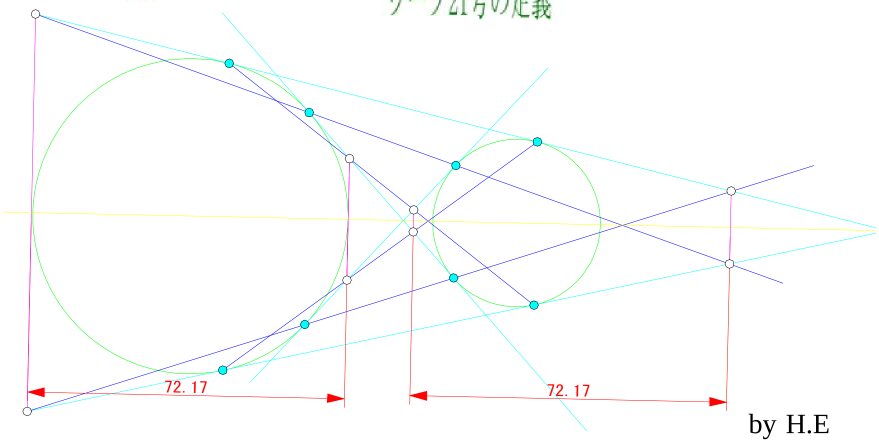
first　leaves

by M.I

We think some things about mathe,
therefore this gMD exsits for all.
We enjoy every things in this diary,
and thanks your shareing of this gMD

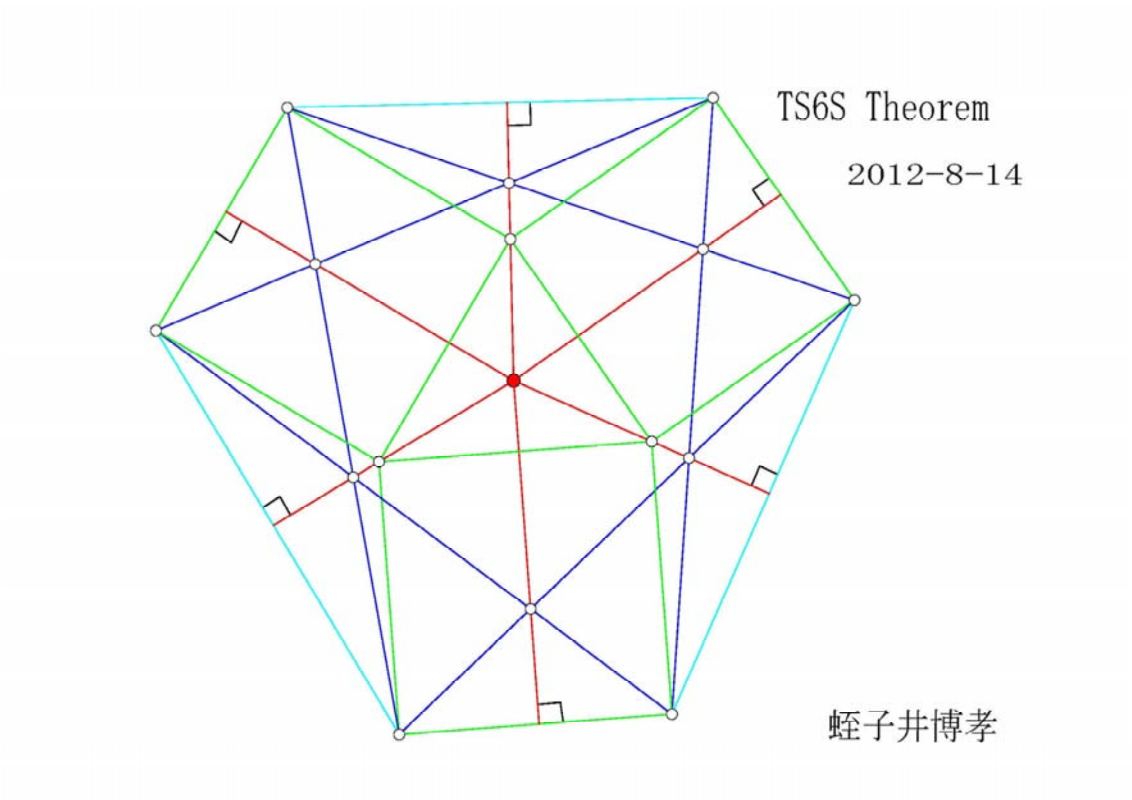
by　H.E

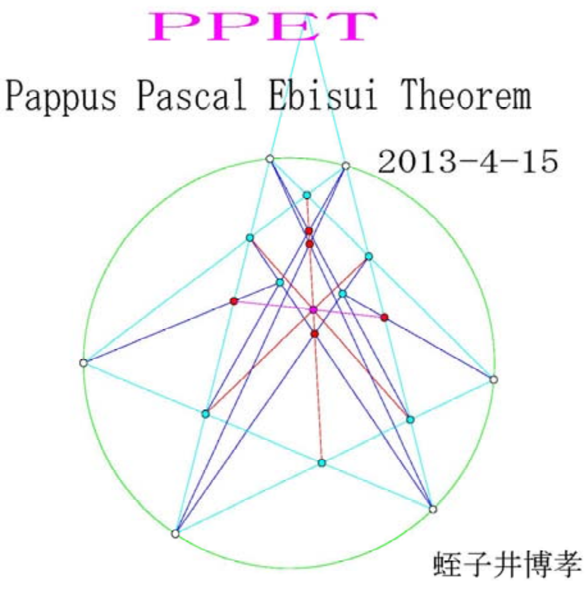




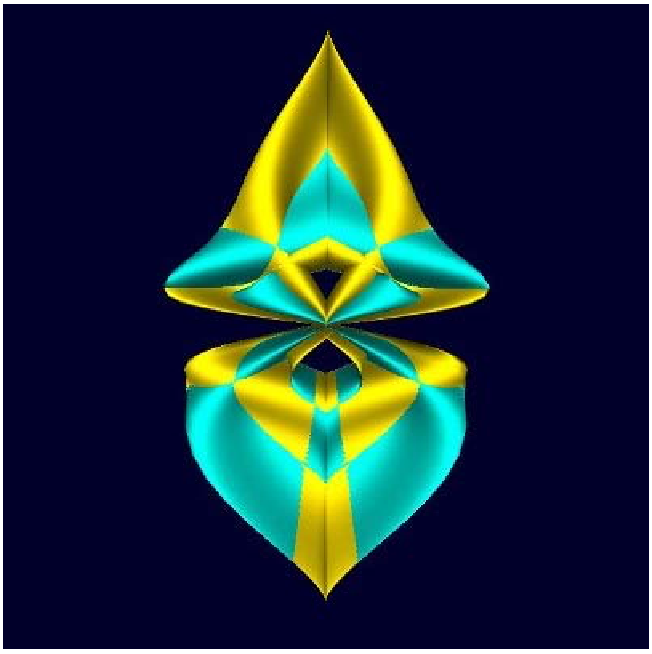
by H.E

卵形線研究センター　http://hoval.blogzine.jp/　2013-4-20：rv4-21


TS6S Theorem
2012-8-14
蛭子井博孝


PPET
Pappus Pascal Ebisui Theorem
2013-4-15
蛭子井博孝

３ D by Maria Intagliata



```
> # M H number Analysis by H.E:
> c := 0 :for h from 1 to 8 do for e from h + 1 to 5 do for m from e + 1 to 13 do  if m^(h+e)
    = (h + e)^m then c := c + 1 : print(E^(H+M) = (H+M)^E, [H, M, E](c) = [h, m, e]) fi:od:
    od:od:
```

$E^{H+M}=(H+M)^E, [H(1), M(1), E(1)]=[1, 3, 2]$

$E^{H+M}=(H+M)^E, [H(2), M(2), E(2)]=[1, 4, 3]$

$E^{H+M}=(H+M)^E, [H(3), M(3), E(3)]=[1, 5, 4]$

$E^{H+M}=(H+M)^E, [H(4), M(4), E(4)]=[1, 6, 5]$

$E^{H+M}=(H+M)^E, [H(5), M(5), E(5)]=[2, 5, 3]$

$E^{H+M}=(H+M)^E, [H(6), M(6), E(6)]=[2, 6, 4]$

$E^{H+M}=(H+M)^E, [H(7), M(7), E(7)]=[2, 7, 5]$

$E^{H+M}=(H+M)^E, [H(8), M(8), E(8)]=[3, 7, 4]$

$E^{H+M}=(H+M)^E, [H(9), M(9), E(9)]=[3, 8, 5]$

$E^{H+M}=(H+M)^E, [H(10), M(10), E(10)]=[4, 9, 5]$　　(1)

```
> c := 0 :for h from 1 to 8 do for e from h + 1 to 5 do for m from e + 1 to 13 do  if h^e + e^m
    + m^h = e^h + m^e + h^m then c := c + 1 : print(H^E + E^M + M^H = E^H + M^E + H^M, [H, M,
    E](c) = [h, e, m, ]) fi:od:od:od:
```

$H^E+E^M+M^H=E^H+M^E+H^M, [H(1), M(1), E(1)]=[1, 2, 3]$　　(2)

```
> c := 0 :for h from 2 to 100 do for e from h + 1 to 100 do for m from e + 1 to 100 do  if m^h
    = h^e then c := c + 1 : print(M^H = H^E, [H, M, E(c)] = [h, m, e]) fi:od:od:od:
```

$M^H=H^E, [H, M, E(1)]=[2, 8, 6]$

$M^H=H^E, [H, M, E(2)]=[2, 16, 8]$

$M^H=H^E, [H, M, E(3)]=[2, 32, 10]$

$M^H=H^E, [H, M, E(4)]=[2, 64, 12]$

$M^H=H^E, [H, M, E(5)]=[3, 9, 6]$

$M^H=H^E, [H, M, E(6)]=[3, 27, 9]$

$M^H=H^E, [H, M, E(7)]=[3, 81, 12]$

$M^H=H^E, [H, M, E(8)]=[4, 8, 6]$

$M^H=H^E, [H, M, E(9)]=[4, 16, 8]$

$M^H=H^E, [H, M, E(10)]=[4, 32, 10]$

$M^H=H^E, [H, M, E(11)]=[4, 64, 12]$

$M^H=H^E, [H, M, E(12)]=[5, 25, 10]$

$M^H=H^E, [H, M, E(13)]=[6, 36, 12]$

$M^H=H^E, [H, M, E(14)]=[7, 49, 14]$

$M^H=H^E, [H, M, E(15)]=[8, 64, 16]$

$M^H=H^E, [H, M, E(16)]=[9, 81, 18]$

$M^H=H^E, [H, M, E(17)]=[10, 100, 20]$

$M^H=H^E, [H, M, E(18)]=[16, 32, 20]$

$M^H=H^E, [H, M, E(19)]=[16, 64, 24]$

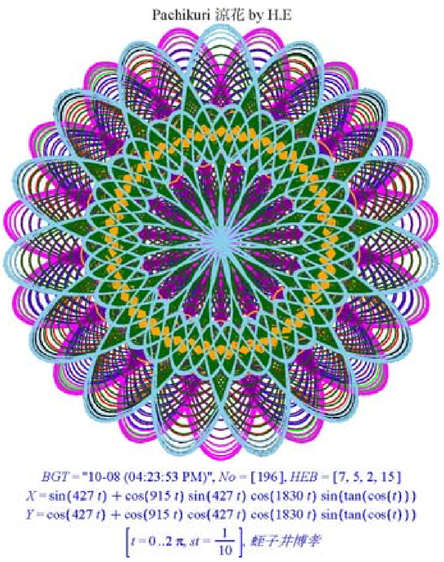
(3)

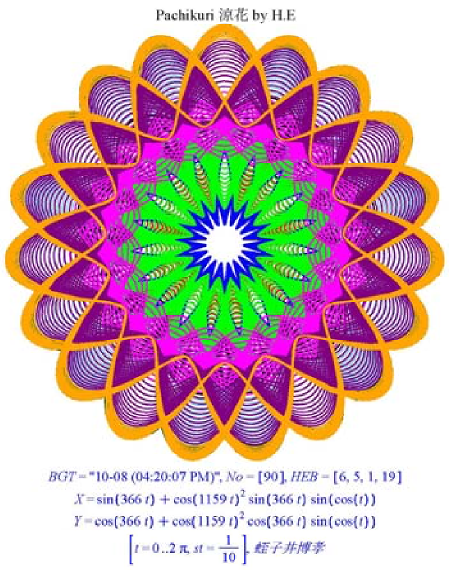
M ＾ H ＝H ＾ E , [H, M, E(20)] ＝ [27, 81, 36]

```
> 81^27; 27^36;
        3381391913522726342930221472392241170198527451848561
        3381391913522726342930221472392241170198527451848561
```

by　Hirotaka

２ D by Hirotaka Ebisui





La Matematica e l' Intelletto

La Matematica chiese all' Intelletto:
"Chi sono io al tuo cospetto?"

Rispose il Padre del Pensiero,
come al solito, sincero:
"Per la tua condotta sempre retta
delle mie figlie sei la prediletta".

"E tu" - ribatté lei con emozione-
"della mia vita l'unica Ragione".

（Maria Intagliata）

IN ENGLISH...
Mathematics and the 'Intellect
Mathematics asked to 'Intellect:
"Who am I in your sight?"
Said the Father of Thought
as usual, sincere:
"For your conduct always straight
are the favorite of my daughters. "
"And you" - she said with emotion-
"in my life the only reason."

What is Mathematics?　　What is Geometry?

Mathematics is thought. Geometry is existance.
Mathematics is think.　Geometry is look.
We can study about Mathe .Geo
and We enjoy Both. So We are happy.
Time and Space in the future will be
Number and Figure.
We hope that　we are we,
and we are love, ideal, passion for Mathe and Geo.
3.1415.... 2.71828.... I^I, ...0, and 1,x,∞
circle ,ellipse,oval,lief,+,×、>、<、。。。。
Thank you for all

(Hirotaka Ebisui)

第２章　卵形線の定義

【作図定理４】．任意の２つの円O_1，円O_2が補助円として与えられたとき，この卵形線を描くこと。

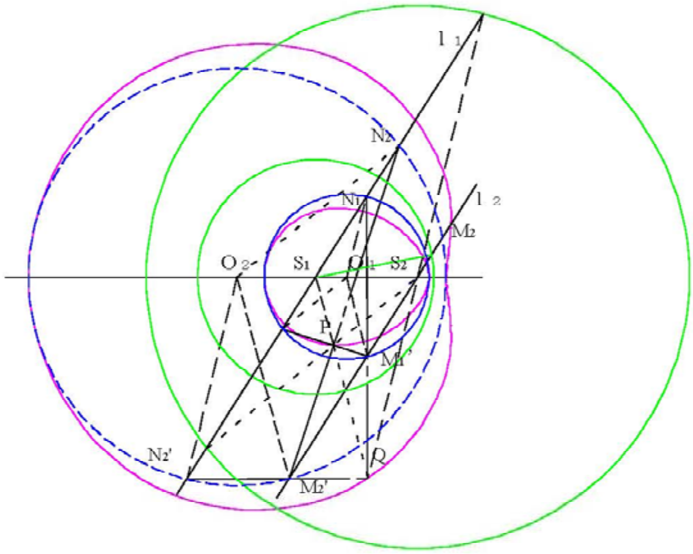


図５　作図定理４による卵形線の構図

図５において，円O_1，円O_2（$O_1 \neq O_2$）が与えられている。２つの円の相似中心S_1，S_2を求め，S_1，S_2を通り，互いに平行な直線l_1，l_2を引く。I_1と円O_1，O_2が交わる点をそれぞれN_1，$N1'$，N_2，N_2'とし，同様にM_1，$M1'$，M_2，M_2'をとる。次に直線$N_1'M_1'$と直線N_2M_2'が垂直に交わる点をP、

同様に直線N_1M_1'と$N_2'M_2'$が垂直に交わる点をQとする。
すると，P，Qは，N_1あるいはM_1が円O_1上を動くとき，卵形線を描く。
同様の作図で、直交する点は、もう一対P'，Q'がある。

Ciao　　　　　Jaa Mata

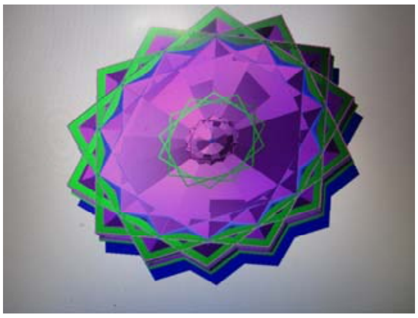
数学日記

geoMathe Diary29th

IDEAL and Passion No.2

by Hirotaka Ebisui and Maria Intagliata

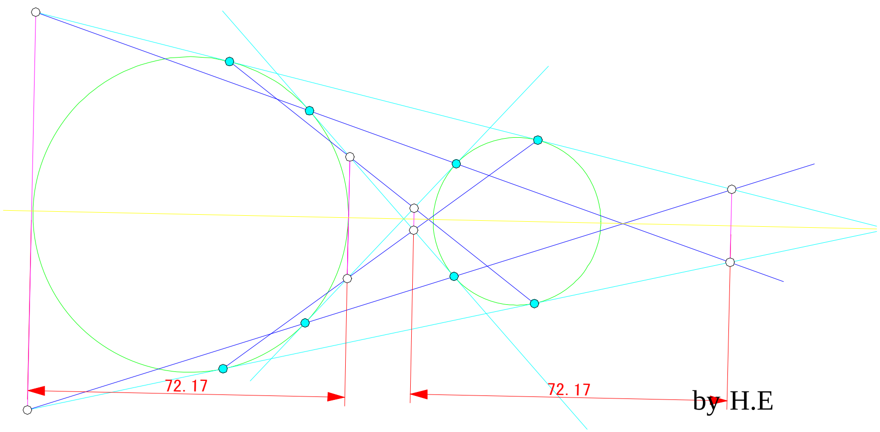
Aim



by H.E

contents

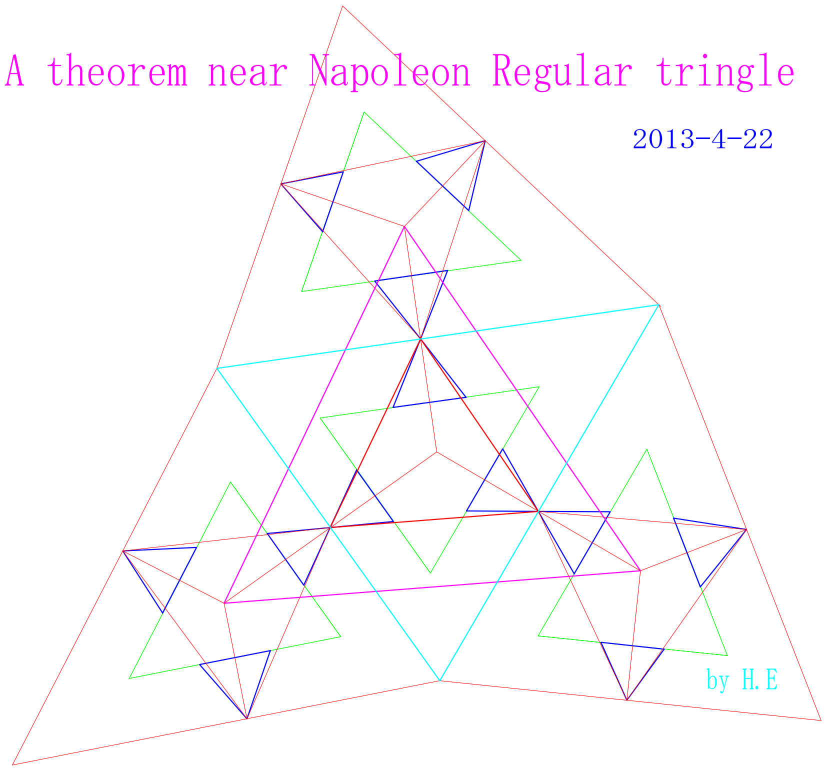
昨日４－２０は誕生日､幸せな日であった。
いろいろな発見もあった。
Pris Table is defined by
｛(P1,P2,X)| p1+p2=X^2 ｝
１７＋１９＝６＾２
４－２１は　スチックメモリが紛失
いらいらした午前中であった。
夜、我々は、５日ペースで
この日記を出すことにした　4-22 記



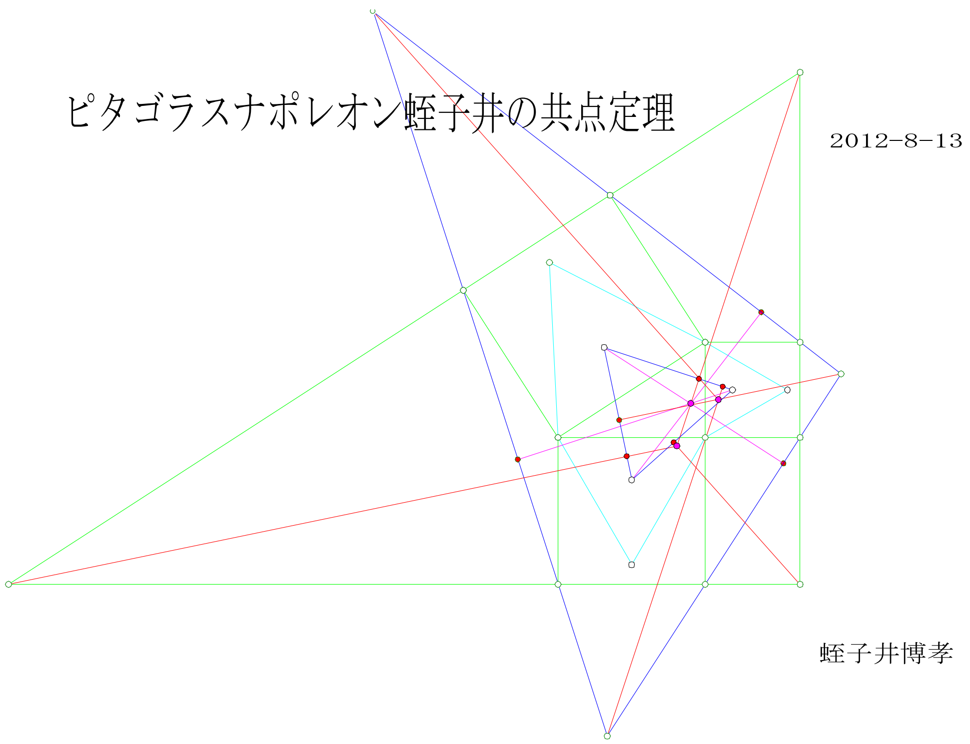
by H.E

卵形線研究センター　http://hoval.blogzine.jp/　2013-4-25

2. Some Theorems wandering in Geometry History Land

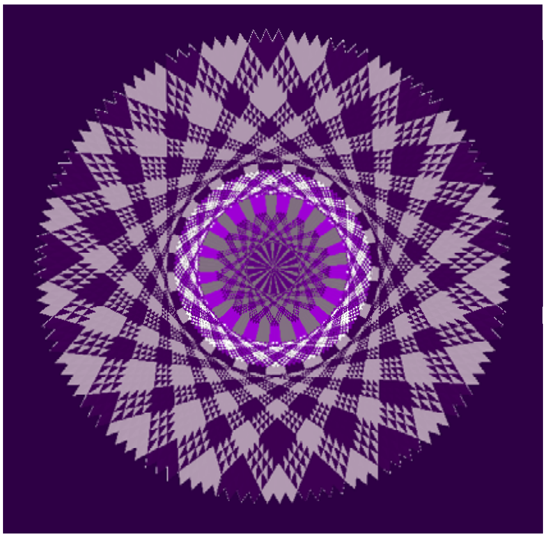


Napoleon Regular Triangle is defined by Three points which are given by 1/3-segment-regular triangle-vertex. And Three reflextion Points of Center point in this figure also make Regular triangle.



3。 3　D　EQG　 by Maria Intagliata

Clock　Gear　1

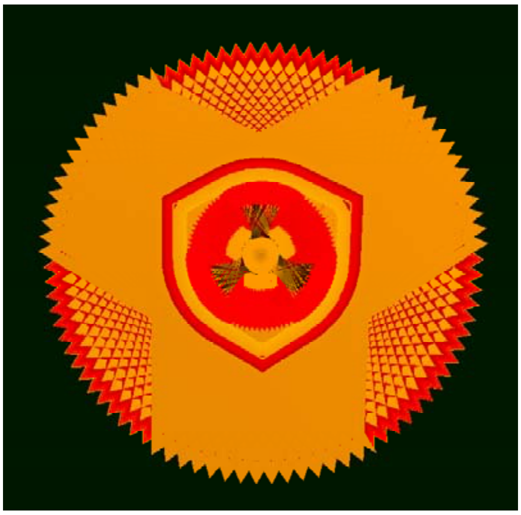


RED　　Daria

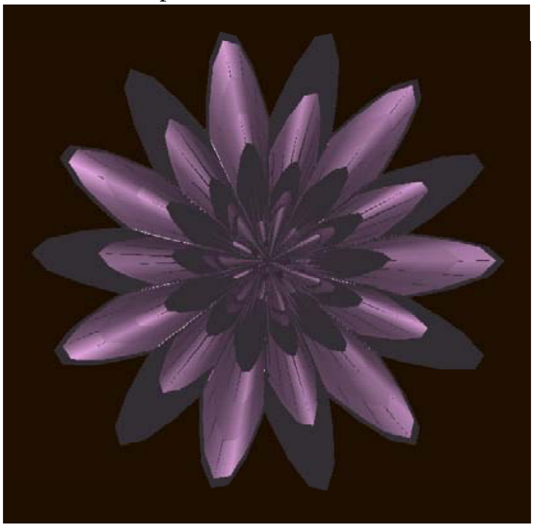
Spring1
X=3*cos（1016201*u）*sin（2*v）
Y=sin（1016203*v）^3*cos（1016221*v）^2
Z=3*sin（1016201*u）*sin（2*v）

Spring4
X=2*cos（439*u）*cos（v）
Y=3*（sin（312*u）^sin（312*u））^sin（312*u）
*cos（443*v）*0.73*sin（449*u）
Z=2*cos（439*u）*sin（v）

Clock Gear　2



pink　Daria



Spring3
X=6*cos（1016201*u）*sin（cos（2*v））
Y=sin（1016203*v）^3*cos（1016221*v）*sin（v）
Z=6*sin（1016201*u）*sin（cos（2*v））

Spring6=Spring4

4. ENJOY NUMBER TABLE

> # Pris are defined as $\{(p1,p2,x,n) | p1+p2=x^n\}$ **by** H.E :

> #We show 25 2jou- 2 Pris, 8 3jou-3pris in THIS Table:

Count [Pris = [17, 19], 36 = $[6]^2$]

2 Count [Pris = [47, 53], 100 = $[10]^2$]

3 Count [Pris = [71, 73], 144 = $[12]^2$]

4 Count [Pris = [283, 293], 576 = $[24]^2$]

5 Count [Pris = [881, 883], 1764 = $[42]^2$]

6 Count [Pris = [1151, 1153], 2304 = $[48]^2$]

7 Count [Pris = [1913, 1931], 3844 = $[62]^2$]

8 Count [Pris = [2591, 2593], 5184 = $[72]^2$]

9 Count [Pris = [3527, 3529], 7056 = $[84]^2$]

10 Count [Pris = [4049, 4051], 8100 = $[90]^2$]

11 Count [Pris = [6047, 6053], 12100 = $[110]^2$]

12 Count [Pris = [7193, 7207], 14400 = $[120]^2$]

13 Count [Pris = [7433, 7451], 14884 = $[122]^2$]

14 Count [Pris = [15137, 15139], 30276 = $[174]^2$]

15 Count [Pris = [20807, 20809], 41616 = $[204]^2$]

16 Count [Pris = [21617, 21647], 43264 = $[208]^2$]

17 Count [Pris = [24197, 24203], 48400 = $[220]^2$]

18 Count [Pris = [26903, 26921], 53824 = $[232]^2$]

19 Count [Pris = [28793, 28807], 57600 = $[240]^2$]

20 Count [Pris = [34847, 34849], 69696 = $[264]^2$]

21 Count [Pris = [46817, 46819], 93636 = $[306]^2$]

22 Count [Pris = [53129, 53147], 106276 = $[326]^2$]

23 Count [Pris = [56443, 56453], 112896 = $[336]^2$]

24 Count [Pris = [69191, 69193], 138384 = $[372]^2$]

25 Count [Pris = [74489, 74507], 148996 = $[386]^2$] **(1)**

Count $1_{88\ th\ prime}$ [Pris = [439, 443, 449], 1331 = $[11]^3$]

Count $2_{3699\ th\ prime}$ [Pris = [34603, 34607, 34613], 103823 = $[47]^3$]

Count $3_{79703\ th\ prime}$ [Pris = [1016201, 1016203, 1016221], 3048625 = $[145]^3$]

Count $4_{263169\ th\ prime}$ [Pris = [3696493, 3696523, 3696551], 11089567 = $[223]^3$]

Count $5_{283356\ th\ prime}$ [Pris = [4002991, 4002997, 4003001], 12008989 = $[229]^3$]

Count $6_{434938\ th\ prime}$ [Pris = [6344687, 6344729, 6344747], 19034163 = $[267]^3$]

Count $7_{678280\ th\ prime}$ [Pris = [10221397, 10221443, 10221457], 30664297 = $[313]^3$]

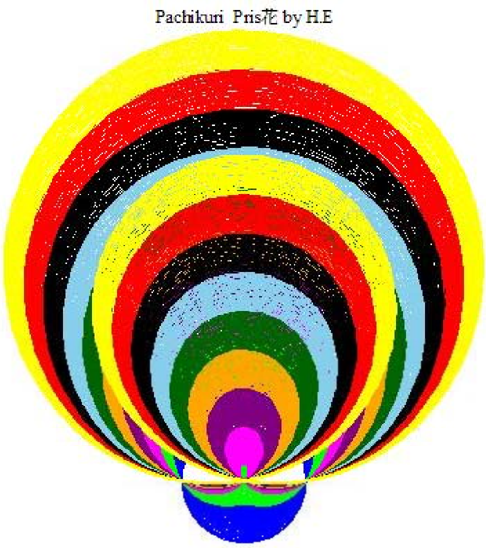
Count $8_{950267\ th\ prime}$ [Pris = [14662309, 14662331, 14662337], 43986977 = $[353]^3$] **(2)**

>

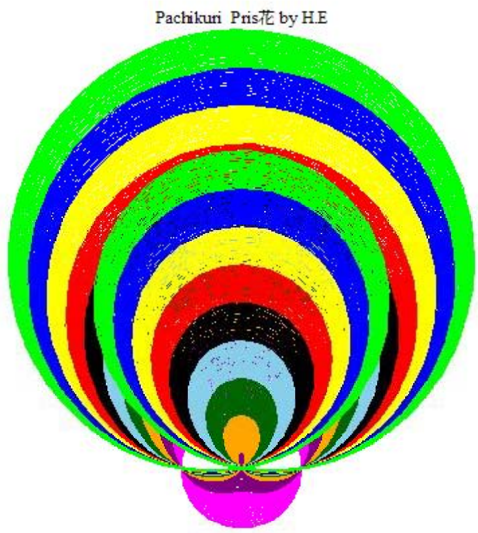
>

5.　2D　and 3D EQG by Hirotaka Ebisui

Pris Boloon 1　　439

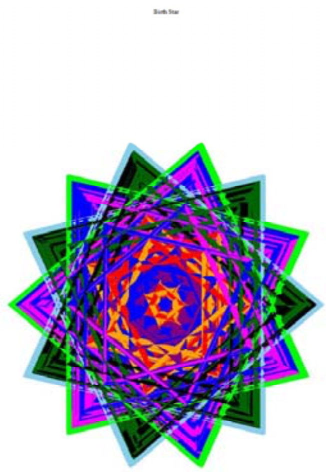


Pris Boloon 2　　443



Green Rose Birth Star

Orange Rose Birth Star



6.　　" PC and Creative"

" PC and Creative"　　Hirotaka Ebisui

Resently, We use PCs every day ,and, We feel their good ability in many fields. I use Maple Soft to creat 2D 3D CG,and make Number Table. The reason of These Creative that we show on orther pages depend on PC high speep Clock Pulse(2G = 2000000000hez waves/second) CPU and Grafic Accselarater which are made by PC engnear. So, we must appreciate to them on here. When we use PC soft for mathe, We often feel a lot of creative of PC,and then, We feel Happinnes.
I use PCs from 1980.and I get Good New Results as we show in this geoMathe Diary.But, I have spended many years to get New resent Results.Day by Day ,we become easy comyunicater in the Net world. and to be able to share the result is equal to "Pc and Creative" exsitance beyond geo Mathe field.
Thank you for your reading this airtcle.

PC and creativity　In English　　Maria Intagliata

Our imagination has the freedom to think far too absurd or impossible, being used in a productive purpose by creativity.
This capability has the purpose of creating, not out of nothing, ideas and original and functional objects, through the processing of information. According to this definition, even the computer would be creative, but at least it lacks the raw material: the imagination.
Creativity is not an innate gift, but only mental skill that can not be taught, it should be developed together with the mitochondria that multiply in neurons. It has to be exercised continuously, thanks to motivation, should not be inhibited in the study with a pre-packaged and repetitive teaching, which limits the intuition and curiosity. It should however be stimulated

by offering almost as a game also scientific activities, such as the study of mathematics.

The game has an important role because preforms to creativity in life, although this is not a game. And what better tool of the PC? This, now inseparable playmate, is able to stimulate the imagination, creativity and the ability to develop on their own.

Thanks to the software, which especially the very young quickly learn and use with great mastery, you can develop creativity, without reducing it to only intuition and curiosity, with commitment, motivation and determination.

PC is a very useful tool because it allows simulations, tests and choices, family activities for creativity in many fields: graphic design, photography, 3D modeling, video, animation, sound design, etc..

The same videogames stimulate creativity and the ability to solve questions and problems. Their intentions are manifold: sports, train the mind, fight aging. But lately they are also used as a teaching aid, even in some universities, where students of Economics are training with specific games that challenge to make decisions and be creative. Video games, in fact, may also arouse positive emotions that give a boost of energy to unleash the creative power.

PC e creatività　　In Italian　　Maria Intagliata

La nostra fantasia ha la libertà estrema di pensare anche l’ assurdo o l’ impossibile, venendo utilizzata in maniera finalizzata e produttiva dalla creatività.

Questa capacità ha lo scopo di creare, non dal nulla, idee ed oggetti originali e funzionali, attraverso l’ elaborazione di informazioni . Secondo questa definizione anche il computer sarebbe creativo, ma gli manca almeno la materia prima: la fantasia.

La creatività non è una dote innata, ma solo un’abilità mentale che, non potendo essere insegnata, va sviluppata insieme ai mitocondri che si moltiplicano nei neuroni. Essa va esercitata continuamente grazie a stimoli motivazionali ; non va inibita nello studio con un insegnamento ripetitivo e preconfezionato, che ne limiti l’intuizione e la curiosità. Va invece stimolata proponendo quasi come gioco anche attività di tipo scientifico, come lo studio della matematica.

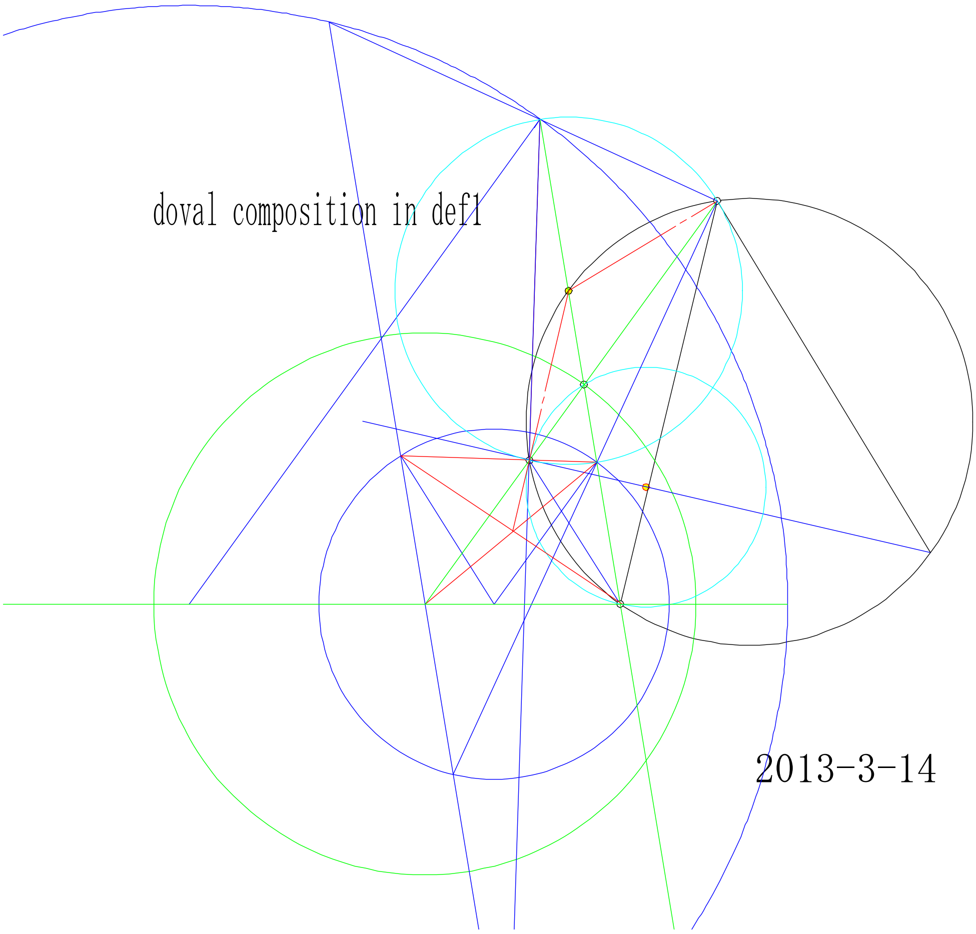
Il gioco ha un ruolo importante perché preforma alla creatività nella vita, anche se questa un gioco non è. E quale strumento migliore del PC? Questo, oramai inseparabile compagno di giochi, è in grado di stimolare la fantasia, la creatività e di sviluppare le capacità in modo autonomo.

Grazie ai software, che soprattutto i giovanissimi apprendono rapidamente ed usano con grande padronanza , è possibile sviluppare la creatività, senza ridurla alle sole intuizione e curiosità, con impegno, motivazione e determinazione.

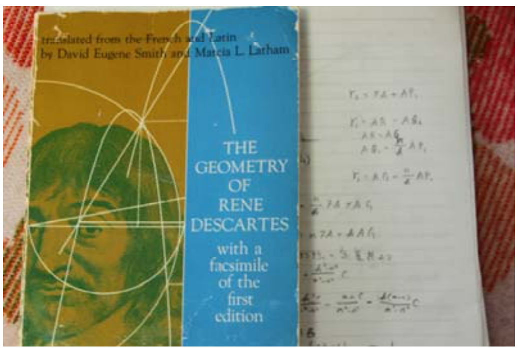
In questo il PC è un validissimo strumento poiché permette simulazioni, verifiche e scelte, attività familiari alla creatività in molti campi: grafica, fotografia, modellazione 3D, video, animazione, sound design ecc.

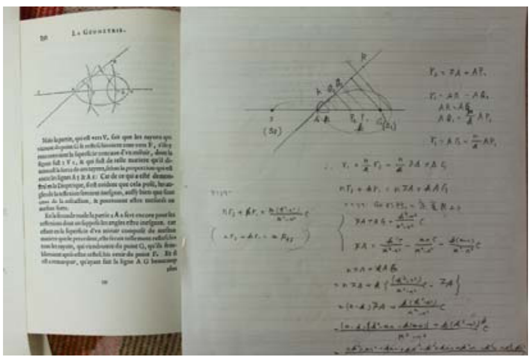
Gli stessi videogiochi stimolano la creatività e la capacità di risolvere quesiti e problemi. I loro intenti sono molteplici : fare sport, allenare la mente , combattere l’invecchiamento. Ma sono ultimamente utilizzati anche come supporto didattico, anche in alcuni atenei, dove studenti di Economia si allenano con specifici videogame che stimolano a prendere decisioni e ad essere creativi. I videogiochi , infatti, possono risvegliare anche emozioni positive che danno una carica di energia a sprigionare la potenza creativa.

7. Doval Geomtery in it's definition Composition

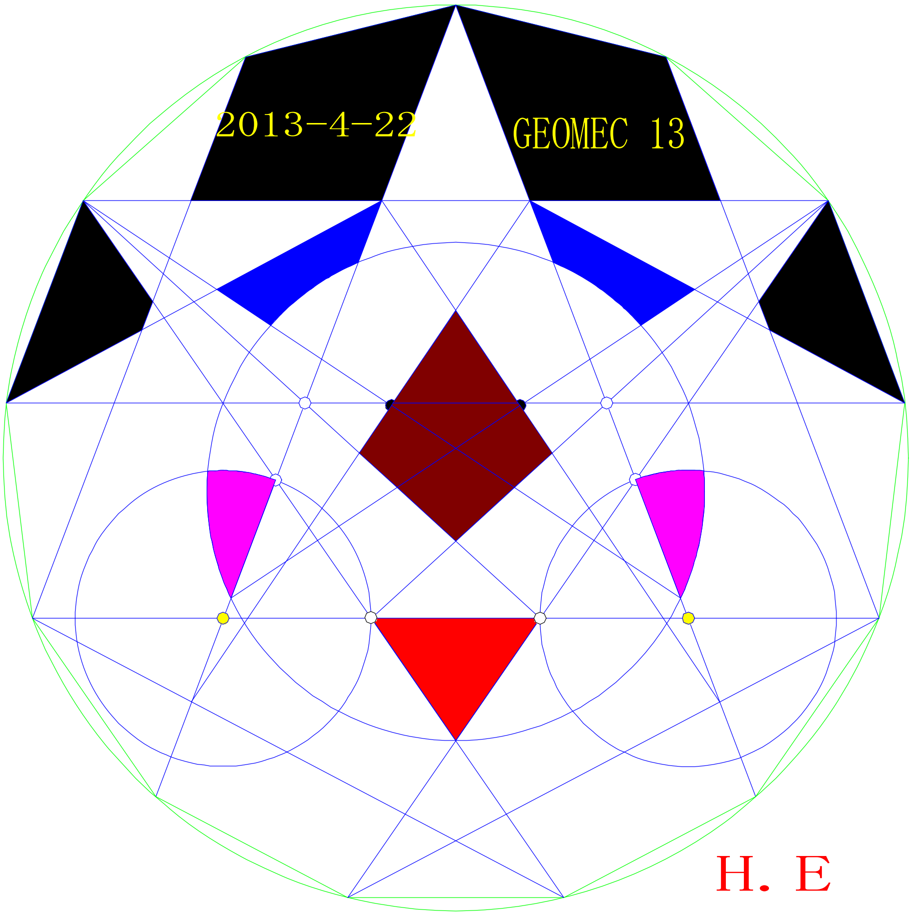


This is Doval DEF 1 Composition（fixed Circle and fixed point） adding｛ ［normal-lines tangent-lines draw-Method］ theorem-composition.｝





THANK YOU！！！



Ciao　　　　　Jaa Mata

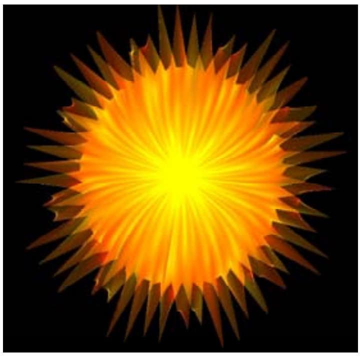
数学日記

geoMathe Diary30th

IDEAL and Passion No.3

by Hirotaka Ebisui（Editor）and Maria Intagliata

hope

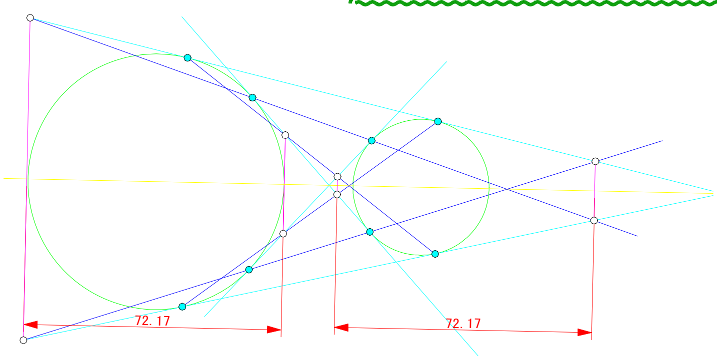


by M.I

contents

Last September I retired. The teaching of mathematics, together with the family, are my whole life. To win the sadness and keep my mind young and contacts with my beloved discipline, I have agreed to share my passion for the work in 3D with my dear friend, prof. Hirotaka Ebisui.I am certain that the pleasant experience of this geoMathediary can make richer and enjoyable the days of my new life

by M.I



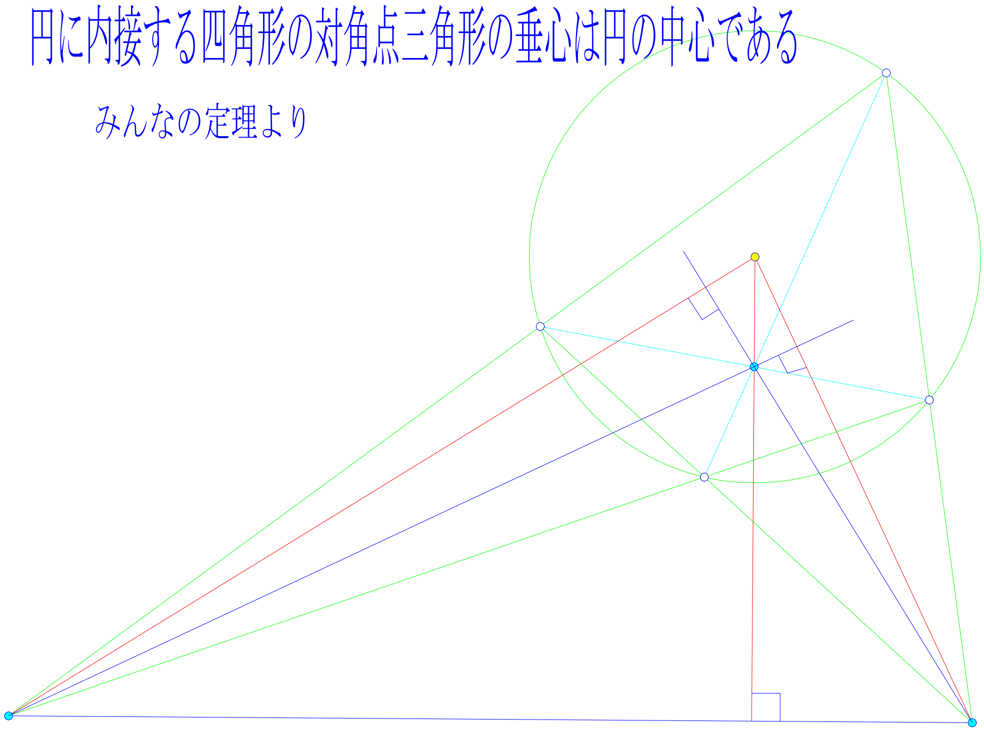
by H.E

卵形線研究センター　http://hoval.blogzine.jp/　2013-4-25 no.2-1

2. Some Theorems in Geometry

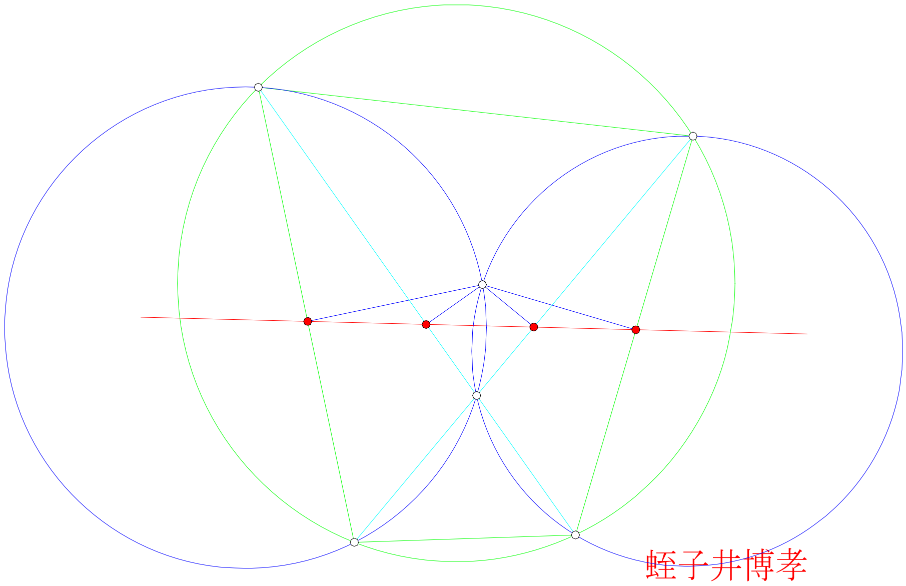
円に内接する四角形の対角点三角形の垂心は円の中心である

みんなの定理より



蛭子井博孝

円に内接する四角形の対角線による分割三角形の外接円の交点に対するその三角形のシムソン線は共通線である



蛭子井博孝

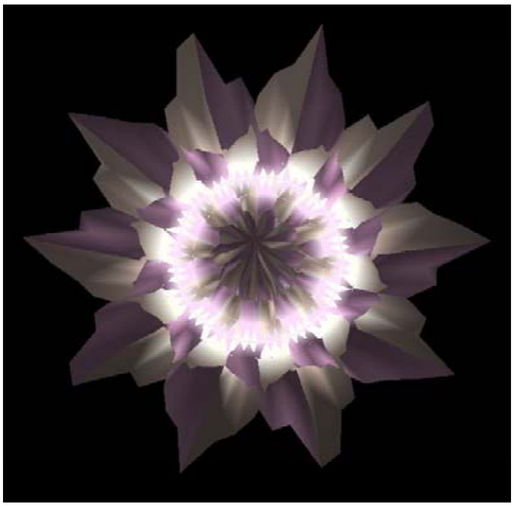
３．NUM　TABLE　created　by　Maple by　H.E

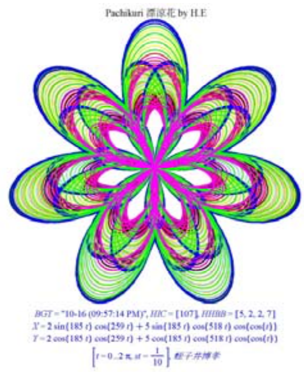
\> # NUMBER Table　$\{x^2+y^2=z^h | 1<x<y\le 100, 2<h\le 100\}$ **by** *H.E* :

$No(1), [2]^2+[11]^2=[5]^3$
$No(2), [5]^2+[10]^2=[5]^3$
$No(3), [7]^2+[24]^2=[5]^4$
$No(4), [9]^2+[46]^2=[13]^3$
$No(5), [10]^2+[30]^2=[10]^3$
$No(6), [10]^2+[55]^2=[5]^5$
$No(7), [15]^2+[20]^2=[5]^4$
$No(8), [16]^2+[88]^2=[20]^3$
$No(9), [17]^2+[68]^2=[17]^3$
$No(10), [18]^2+[26]^2=[10]^3$
$No(11), [25]^2+[50]^2=[5]^5$
$No(12), [26]^2+[39]^2=[13]^3$
$No(13), [28]^2+[96]^2=[10]^4$
$No(14), [38]^2+[41]^2=[5]^5$
$No(15), [40]^2+[80]^2=[20]^3$
$No(16), [47]^2+[52]^2=[17]^3$
$No(17), [60]^2+[80]^2=[10]^4$
$No(18), [75]^2+[100]^2=[25]^3$
$No(19), [75]^2+[100]^2=[5]^6$　　**(1)**

\>
\>

４． 2D（byH.E）　３Ｄ（ｂｙ M.I）　EQG





5 .　　" TEACH"

Insegnare è sedurre　In Italian　　　by Maria Intagliata

Leggendo le biografie di grandi scienziati o studiosi, anche matematici, si trova sempre qualche riferimento ad un docente che ha segnato una loro scelta o un orientamento decisivo nella vita. In fondo, spesso, anche per ciascuno di noi è così: talvolta l'inclinazione verso una disciplina è stata determinate dalla bravura, ma soprattutto dal fascino dell'insegnante. E di seduzione si tratta! Lo studente guarda estasiato l'insegnante che è capace di sedurlo e che può farlo solo se esercita non un mestiere ma una vocazione, nobile ed autentica. L'empatia che deve nascere tra allievo e docente, perché l'insegnamento sia utile al giovane , nella sua crescita umana e culturale, si deve fondare su quell'amore che il docente ha per quello che insegna e che scaturisce da quello che dice. Io posso insegnare bene la matematica solo se la amo e sono in grado di trasferire ad altri la mia passione. S'impara a conoscere solo ciò che si ama e più si ama e ci si appassiona e più profonda e proficua è la conoscenza. Questa è una conquista faticosa, ma l'amore e la passione di chi ce la regala possono renderla più agevole e preziosa. Io sono una insegnante e la cosa più bella che mi sono sentita dire da uno studente in tutta la mia carriera è stata: "Prof, ho capito, ma soprattutto che lei ama quello che dice!"

Teaching is seducing　In English　　by Maria INtagliata

Reading the biographies of great scientists or scholars, even mathematicians, there is always some reference to a teacher who scored their choice or decisive guidance in life. After all, often, for each one of us is this: sometimes the inclination towards a discipline has been determined by the skill, but above all by the charm of the teacher. And it comes to seduction!

The student looks ecstatic that the teacher is able to seduce him and he can do it if he pursues not only a profession but a vocation, a noble and authentic.The empathy that must be born between student and teacher, because teaching is useful to young people and their human and cultural growth, must be founded on the love that the teacher has to teach and what that stems from what he says. I can teach mathematics well only if I love her and are able to transfer to others is my passion. We learn to know only what you love and the more we love and we are passionate about and deeper and profitable is knowledge. This is a hard won, but the love and passion of the one who gives it can make it easier and more valuable. I am a teacher and the most beautiful thing that I was told by a student in my whole career has been: "Prof, I understand, but most of all that you love what you said!".

教育とは、蛭子井博孝

教育とは何だろう.自己教育、他者教育、見本と演習を与え合うこと.これですべてと思う。母がよく見せた。肩を見せて育てることを。多くを語っても仕方がない.教育には、情熱と理想が居る。幸い私は、教育職、研究職、教育職に就いた経験がある.目で語るまで熟練しなかったが、乙女のきれいな目をみて、疑問を解決できた経験がある。また、｢します。しなさい。させてください。しなければないませんなどの実行条件のニュワンスの違いをわかることが,仕事上必要であった。人が何が言いたいか、何がしたいか、第2外国語でつかむ経験したことが、役に立つ。教育は、言葉を超えた仕事である。知識の獲得、知的発達は、言葉だけではできない。厳密に考える癖だけでは進歩しない。これが、私の教育経験である。何回も試みることが、一番大事である。ありがとうピタゴラス。

What is to teach?　by Hirotaka Ebisui

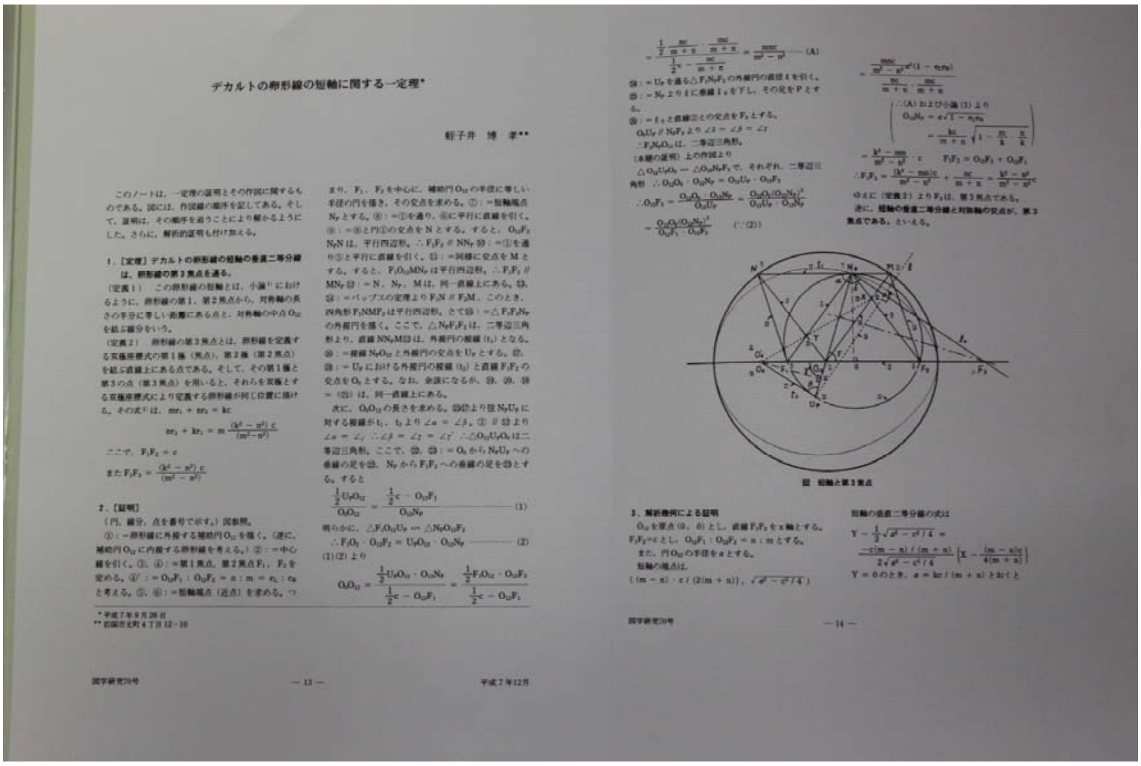
What is to teach?　Selfedu otheredu. To give good example and excersise. This is all to teach,I think. My mother often show me standing form in the kitchin. It is backside for me, and learn what does she do. No more word for Edu. For Edu,we need Ideal and Passion. Furtunately, I had edu job, research job ,and edu jod.I could not be good teacher by teach useing eye contact. But ,one day, pure girls eye give me the inspiration to solve my problem of research. Another　experience. My poss said" we do this.（します）" ,not said "you must do this（しなさい）

We　Need catch what we do. What does he want to say or do? by second langage. I cought them.

To teach is beyond words. For to learn knowledge and to grow in mind, words is not enough、and only to consider detailly is not good. This is myself EDu with others. To try again and again

is most important.Thank Phytagoras（ mytearcher of mathe）.

6. Doval Geomtery in it's Axes Composition

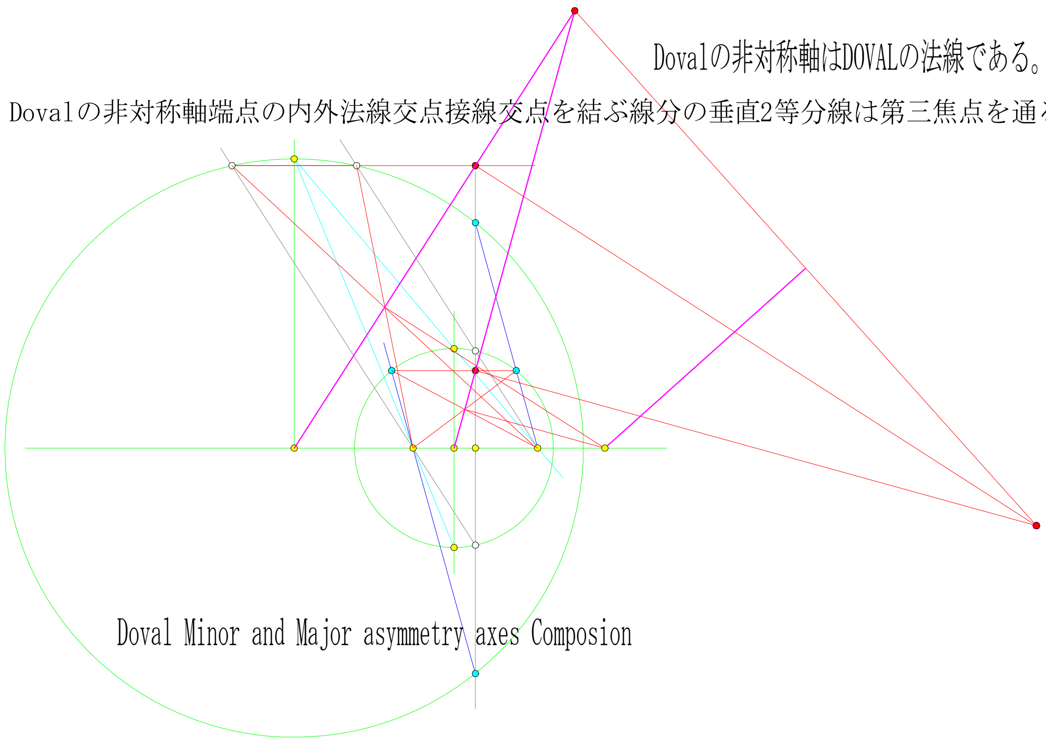


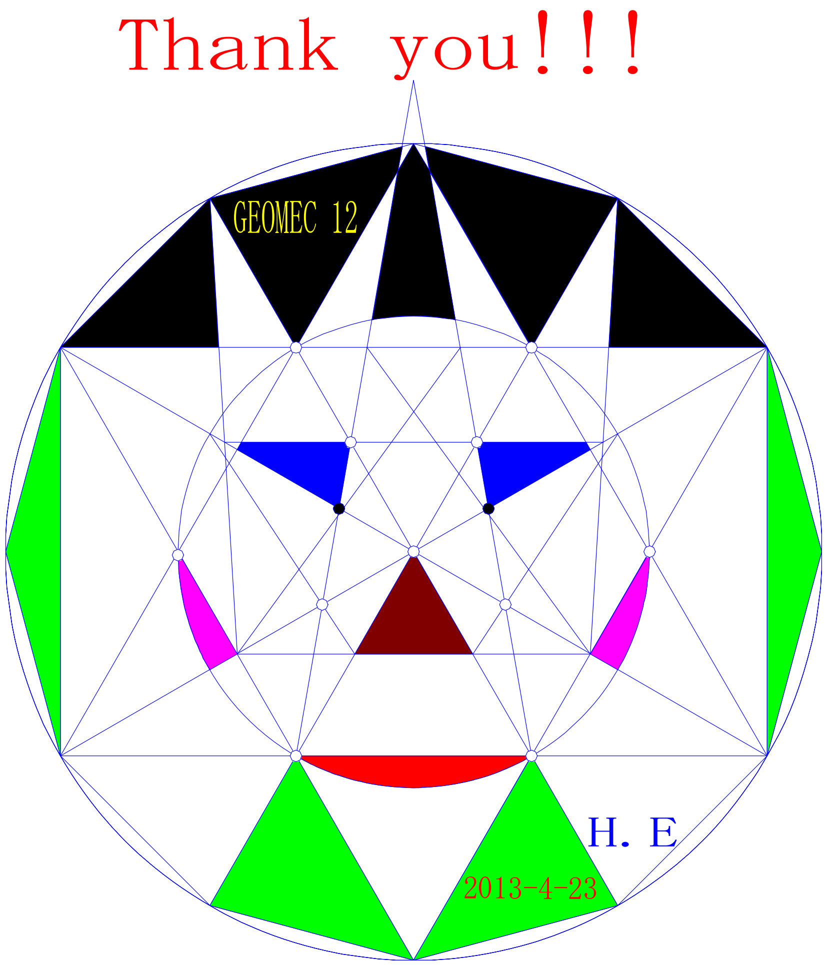
デカルトの卵形線の短軸に関する一定理*

軽子井　博　孝**

このノートは、一定理の証明とその作図に関するものである。図には、作図線の順序を記してある。そして、証明は、その順序を追うことにより解かるようにした。さらに、解析的証明も付け加える。

1.【定理】デカルトの卵形線の短軸の垂直二等分線は、卵形線の第3焦点を通る。





編集後記　目次を決め、二つ目のシムソンの新定理を探すのには苦労した。
証明なしの使命の構図を見つけた。また、マリアさんと自分の CG を一つのページにした.
今回は、教育とはで記事を書き合った。最後の DOVAL についての新定理は自慢できる。
geoMathe　Diary　30th は急いで創った。　3 日に一回のハイペースである。以後 5 日計画
に戻すつもりだ.　　　　　　　　　　　　　　　　　　蛭子井博孝記

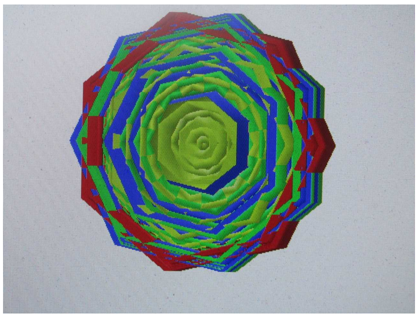
数学日記

geoMathe　Diary31th

IDEAL　and　Passion　 No.4

by　Hirotaka Ebisui（Edit Writer）　and Maria Intagliata（writer）

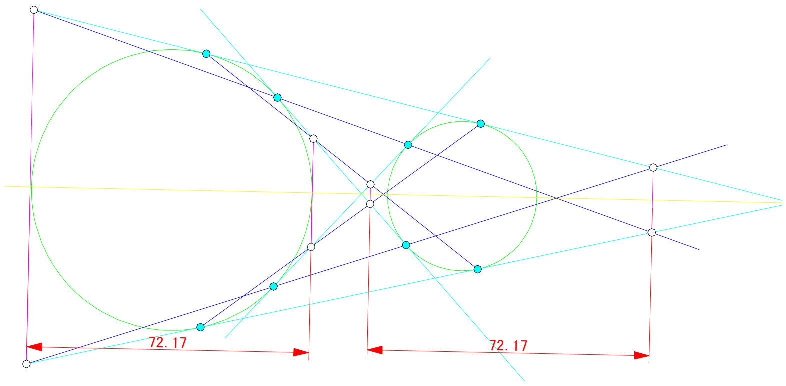
Love



by H.E

contents

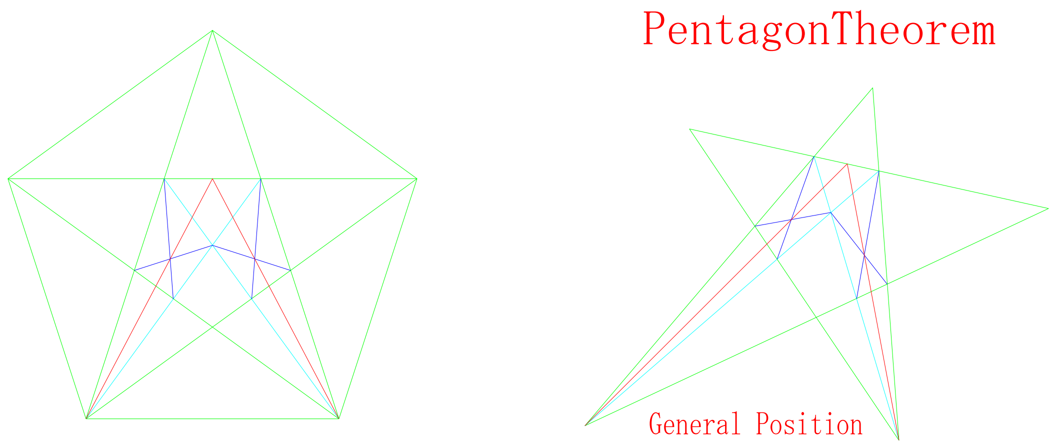
IP=4 をつくっている。200 語メモの題を flower に決めていた。我々は、まだちぐはぐなメモを残しているようだ。彼女の 3D 見て、私のメモを書いた。
何を言おうとしたよくわからない。
numtable　は、大きすぎ、また２は、ささやかになった。TOP を LOVE にした何ができるだろうか。ありがとう。１４　hirotaka 記



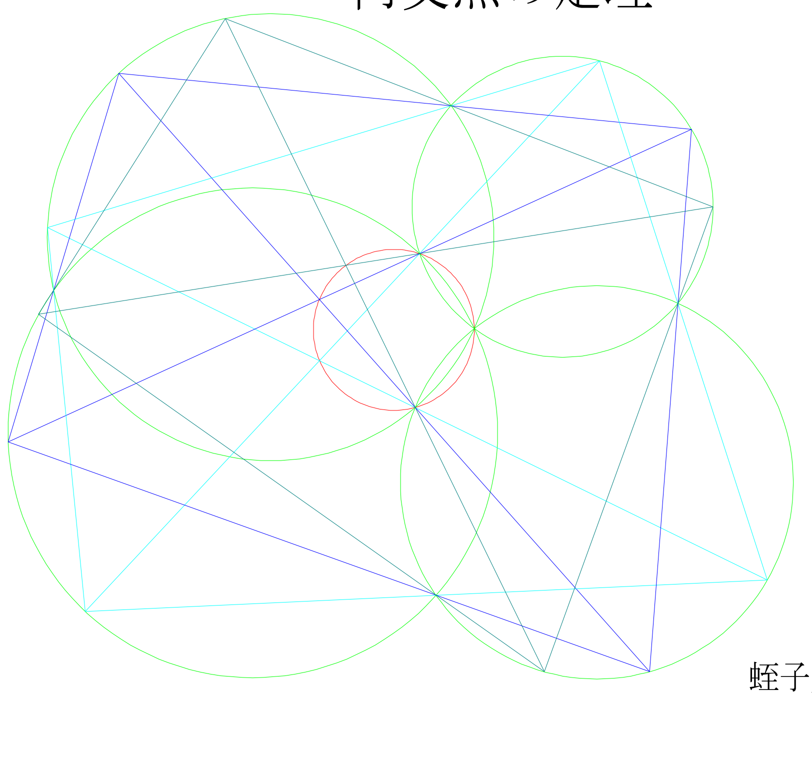
by H.E

卵形線研究センター　http://hoval.blogzine.jp/　2013-4-30

2. Some Theorems wandering in Geometry



円交点の定理



蛭子井博孝

3。　3　D　EQG　　by　M.I

FLOW2

x=cos(6*u-6*v)*0.7*cos(7*v+6*u)*sin(v)^3

y=sin(u)*sin(v)

z=cos(u)*sin(v)

FLOW5

x=4*cos(sin(cos(1.3*u*v-1.01*2*sin(2*u-3*v))))^2*0.91*sin(u*v)^3

y=2*sin(0.8*cos(u))^2*1.13*sin(v)^3

z=0.6*(sin(u)+cos(u))^3*1.5*sin(2*v-3*v)^2

FLOW3

x=3.5^cos(6*u-6*v)*0.7*cos(7*v-6*u)*sin(v)^3

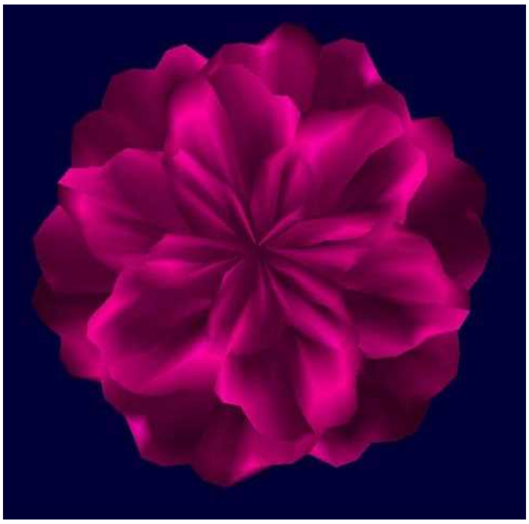
y=sin(u)*sin(v)

z=cos(u)*sin(v)

x=3^sin(cos(6*u+6*v))*0.8*cos(sin(6*v-5*u))

y=1.18*sin(u)*sin(sin(v))

z=cos(u)*sin(v)



4 Number Table 1

$\{Pm < \ n^5 < P(m+1) | 2 \le n \le 16\}$

$[2]^5$ prit me = [[P(11) = 31], [[2]^5 = 32], [P(12) = 37]]

$[3]^5$ prit me = [[P(53) = 241], [[3]^5 = 243], [P(54) = 251]]

$[4]^5$ prit me = [[P(172) = 1021], [[4]^5 = 1024], [P(173) = 1031]]

$[5]^5$ prit me = [[P(445) = 3121], [[5]^5 = 3125], [P(446) = 3137]]

$[6]^5$ prit me = [[P(985) = 7759], [[6]^5 = 7776], [P(986) = 7789]]

$[7]^5$ prit me = [[P(1939) = 16787], [[7]^5 = 16807], [P(1940) = 16811]]

$[8]^5$ prit me = [[P(3512) = 32749], [[8]^5 = 32768], [P(3513) = 32771]]

$[9]^5$ prit me = [[P(5968) = 59029], [[9]^5 = 59049], [P(5969) = 59051]]

$[10]^5$ prit me = [[P(9592) = 99991], [[10]^5 = 100000], [P(9593) = 100003]]

$[11]^5$ prit me = [[P(14773) = 161047], [[11]^5 = 161051], [P(14774) = 161053]]

$[12]^5$ prit me = [[P(21950) = 248827], [[12]^5 = 248832], [P(21951) = 248839]]

$[13]^5$ prit me = [[P(31616) = 371291], [[13]^5 = 371293], [P(31617) = 371299]]

$[14]^5$ prit me = [[P(44413) = 537811], [[14]^5 = 537824], [P(44414) = 537841]]

$[15]^5$ prit me = [[P(60927) = 759371], [[15]^5 = 759375], [P(60928) = 759377]]

$[16]^5$ prit me = [[P(82025) = 1048573], [[16]^5 = 1048576], [P(82026) = 1048583]] **(1)**

Table2

> # Pris are defined as $\{(p1,p2,x,n)|p1+p2=x^n\}$ **by** H.E :

> #We show 25 2jou- 2 Pris, 8 3jou-3pris in THIS Table:

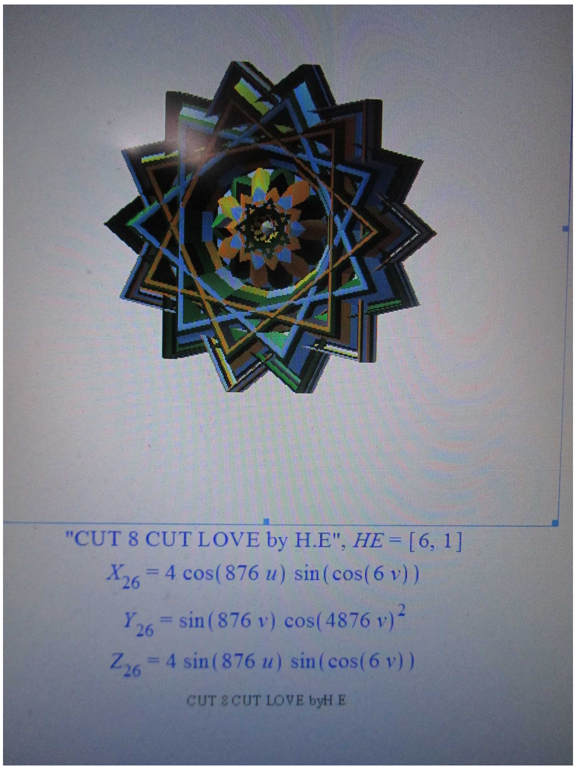
Count [Pris = [17, 19], 36 = $[6]^2$]
2 Count [Pris = [47, 53], 100 = $[10]^2$]
3 Count [Pris = [71, 73], 144 = $[12]^2$]
4 Count [Pris = [283, 293], 576 = $[24]^2$]
5 Count [Pris = [881, 883], 1764 = $[42]^2$]
6 Count [Pris = [1151, 1153], 2304 = $[48]^2$]
7 Count [Pris = [1913, 1931], 3844 = $[62]^2$]
8 Count [Pris = [2591, 2593], 5184 = $[72]^2$]
9 Count [Pris = [3527, 3529], 7056 = $[84]^2$]
10 Count [Pris = [4049, 4051], 8100 = $[90]^2$]
11 Count [Pris = [6047, 6053], 12100 = $[110]^2$]
12 Count [Pris = [7193, 7207], 14400 = $[120]^2$]
13 Count [Pris = [7433, 7451], 14884 = $[122]^2$]
14 Count [Pris = [15137, 15139], 30276 = $[174]^2$]
15 Count [Pris = [20807, 20809], 41616 = $[204]^2$]
16 Count [Pris = [21617, 21647], 43264 = $[208]^2$]
17 Count [Pris = [24197, 24203], 48400 = $[220]^2$]
18 Count [Pris = [26903, 26921], 53824 = $[232]^2$]
19 Count [Pris = [28793, 28807], 57600 = $[240]^2$]
20 Count [Pris = [34847, 34849], 69696 = $[264]^2$]
21 Count [Pris = [46817, 46819], 93636 = $[306]^2$]
22 Count [Pris = [53129, 53147], 106276 = $[326]^2$]
23 Count [Pris = [56443, 56453], 112896 = $[336]^2$]
24 Count [Pris = [69191, 69193], 138384 = $[372]^2$]
25 Count [Pris = [74489, 74507], 148996 = $[386]^2$] **(1)**

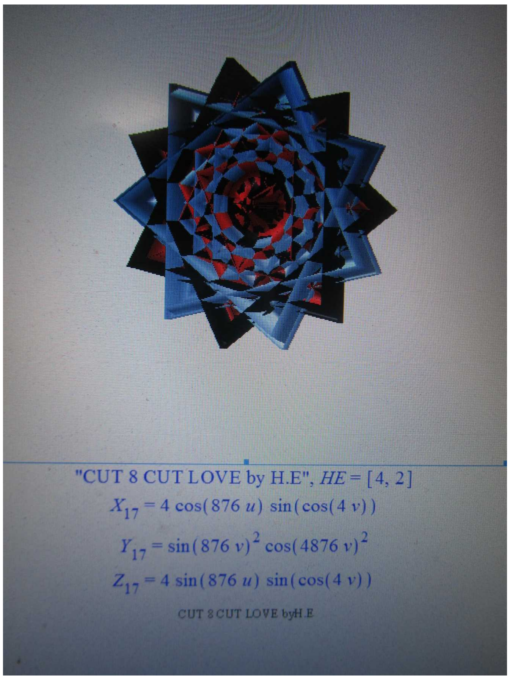
Count $1_{88\ th\ prime}$ [Pris = [439, 443, 449], 1331 = $[11]^3$]
Count $2_{3699\ th\ prime}$ [Pris = [34603, 34607, 34613], 103823 = $[47]^3$]
Count $3_{79703\ th\ prime}$ [Pris = [1016201, 1016203, 1016221], 3048625 = $[145]^3$]
Count $4_{263169\ th\ prime}$ [Pris = [3696493, 3696523, 3696551], 11089567 = $[223]^3$]
Count $5_{283356\ th\ prime}$ [Pris = [4002991, 4002997, 4003001], 12008989 = $[229]^3$]
Count $6_{434938\ th\ prime}$ [Pris = [6344687, 6344729, 6344747], 19034163 = $[267]^3$]
Count $7_{678280\ th\ prime}$ [Pris = [10221397, 10221443, 10221457], 30664297 = $[313]^3$]
Count $8_{950267\ th\ prime}$ [Pris = [14662309, 14662331, 14662337], 43986977 = $[353]^3$] **(2)**

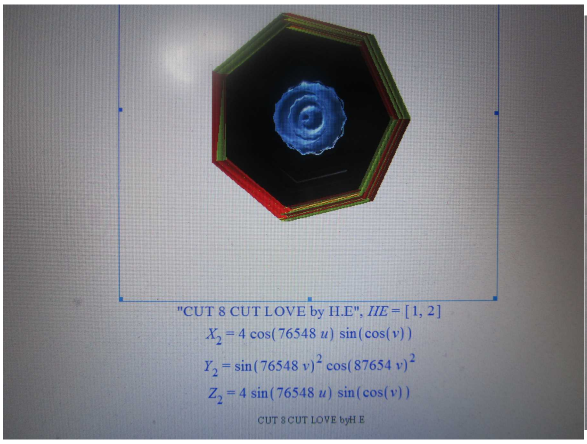
>

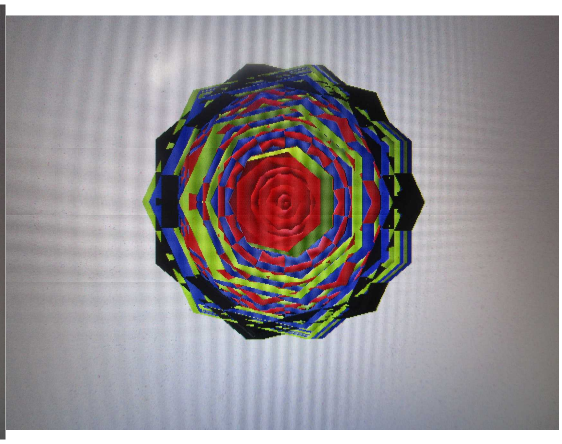
>

5.　3　D　EQG　by　H.E


"CUT 8 CUT LOVE by H.E", $HE = [6, 1]$
$X_{26} = 4\cos(876\,u)\,\sin(\cos(6\,v))$
$Y_{26} = \sin(876\,v)\,\cos(4876\,v)^2$
$Z_{26} = 4\sin(876\,u)\,\sin(\cos(6\,v))$
CUT 8 CUT LOVE byH.E


"CUT 8 CUT LOVE by H.E", $HE = [4, 2]$
$X_{17} = 4\cos(876\,u)\,\sin(\cos(4\,v))$
$Y_{17} = \sin(876\,v)^2\,\cos(4876\,v)^2$
$Z_{17} = 4\sin(876\,u)\,\sin(\cos(4\,v))$
CUT 8 CUT LOVE byH.E


"CUT 8 CUT LOVE by H.E", $HE = [1, 2]$
$X_2 = 4\cos(76548\,u)\,\sin(\cos(v))$
$Y_2 = \sin(76548\,v)^2\,\cos(87654\,v)^2$
$Z_2 = 4\sin(76548\,u)\,\sin(\cos(v))$
CUT 8 CUT LOVE byH.E



6.　"Flower"

花それは、大きなあこがれ、すぐにしぼむ朝顔
そこにある美は、一つ一つが、大きな愛を語り
命を与える大きな論理。
だが、美は、陰に隠れ、見えない。
今日もまた、咲く朝顔
突然　君は現れ、たたずむ。
ちいさな僕を、眺め消えていく。
分けもなく涙があふれ、すべては、夢の中にあり、
ただ、かなしさが、涙する。
しらない町の知らない人が、花を、もてあそぶ。
しかし、花は、多くを物語る。
ああ、これからが、人生。そう言って、笑っている。

Flower desires a big life.
and soon disapears,
She is morning flower.
The beuaty are talking about big love and theorem.
but, she will hide, and we can not look at them.
she open in the morning again.
suddenly she apears and stands in front of me
and sees a little thought of me and will die.
A lot of tears apears, and she disapears into some dream.
only sadness crys.
At an unknown town, unkown people handle her beauty wildly.
but, she tells the truth.
"oh, all in the future are my live".
she is smiling and he says.

In Italian

Fiori

Se mi venisse data la possibilità di rinascere e di scegliere una diversa natura in una nuova vita, sceglierei di essere un fiore.

Qualcuno ha detto che insieme alle stelle e ai bambini i fiori sono ciò che ci è rimasto del Paradiso. Se non si vuole incorrere nel dubbio sull’esistenza di un Creatore del mondo, basta guardare i fiori illuminati dal sole. La loro bellezza è tale da rendere sopportabile perfino la vita più cinica, più triste e solitaria. Sono sicuramente un capolavoro della natura, una vera opera d’arte: armoniosa sintesi di luce, colore, fragranze inebrianti, forme sorprendenti e perfino strutture matematiche e geometriche.

Osservarli dondolarsi armoniosi sugli steli è una delizia per gli occhi ed una carezza per l’anima. E che dire dei loro messaggi? Un fiore può comunicare amore, bellezza, tenerezza, perdono, augurio e perfino cordoglio. Sembra possedere una sensibilità femminile. Come l’amore e la delicatezza sono il calore che ad una donna fa aprire le braccia alla passione, così il fiore muore se lo si vuole schiudere con la forza: solo il tepore del sole sa aprirlo dolcemente.

Ma quello che più mi colpisce di un fiore è la sua “umiltà” ed insieme la sua forza.

Pur resistente alle sferzate del vento, al rigore del freddo e alla sete della calura, è dolcemente arrendevole: nella sua grandezza di naturale opera d’arte, si piega “umile”, nella sua breve vita, alla superbia del tempo e all’impeto della Natura.

Umiltà

Nasce, cresce, muore
un fiore nel giardino.
Ieri era in boccio,
oggi sorride al sole.

Domani, umilmente,
accetterà la sfida
del tempo inesorabile,
della natura nemica.

Accetto, umilmente,
il mio domani.
Anch’io vedrò la forza
della superba vita.

In English

Flowers

If I had the chance to be reborn and to choose a different nature into a new life, I would choose to be a flower.
Someone said that along with the stars and the children the flowers are what is left of Paradise. If you do not want to incur in case of doubt on the existence of a Creator of the world, just look at the flowers illuminated by the sun. Their beauty is such as to make life bearable even more cynical, more sad and lonely. They are definitely a masterpiece of nature, a true work of art: harmonious synthesis of light, color, heady fragrances, amazing shapes and even mathematical and geometrical structures.
Observing harmonious swing on the stems is a delight for the eyes and a caress for the soul. And what about their posts? A flower can communicate love, beauty, tenderness, forgiveness, hope and even sympathy. He seems to have a feminine sensibility. Like love and delicacy are the heat that let a woman opens her arms to the passion, so the flower dies if you want to open up by force: only the warmth of the sun knows how to open it gently.
But what strikes me most of a flower is its "humility" and together with its strength.
While resistant to wind lashed to the severity of cold and heat, thirst, is sweetly submissive: in its natural greatness of a work of art, it bends "humble" in his short life, the pride of the time and the rush of Nature.

Humility

Is born, grows, dies
a flower in the garden.
Yesterday it was in bud,
smiling in the sun today.
Tomorrow, humbly,
accepts the challenge
of inexorable time,
of the nature enemy.
I accept, humbly,
my tomorrow.
Even when I see the strength
of the superb life.

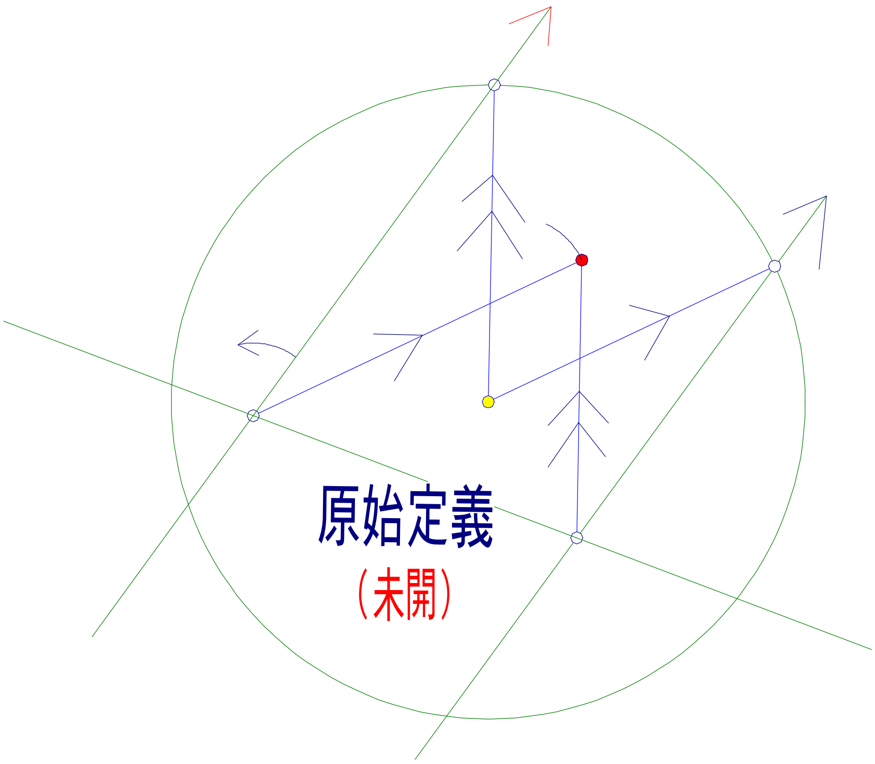
7 Doval

Definitions Of Doval

Doval(動張る) の定義集

蛭子井博孝著

Doval とは、点と円からの距離の比が一定な曲線



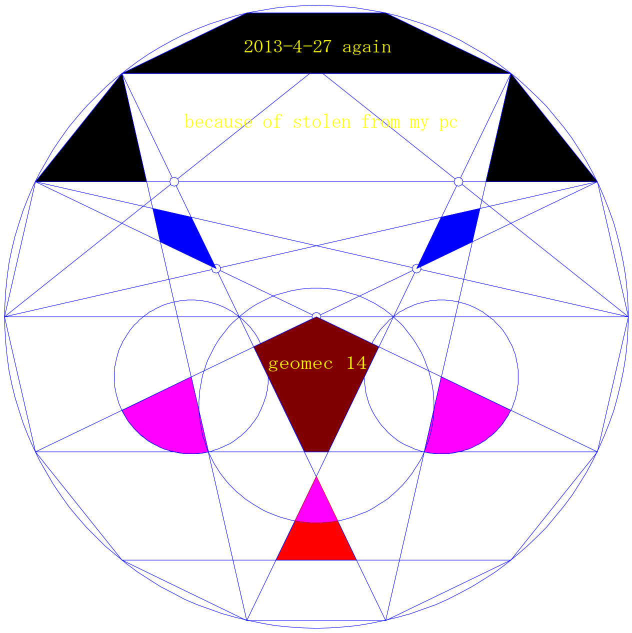
卵形線研究センター
http://aitoyume.de-blog.jp/doval/
http://eh85.blogzine.jp/
http://hovall.blogzine.jp/

休憩コーナー

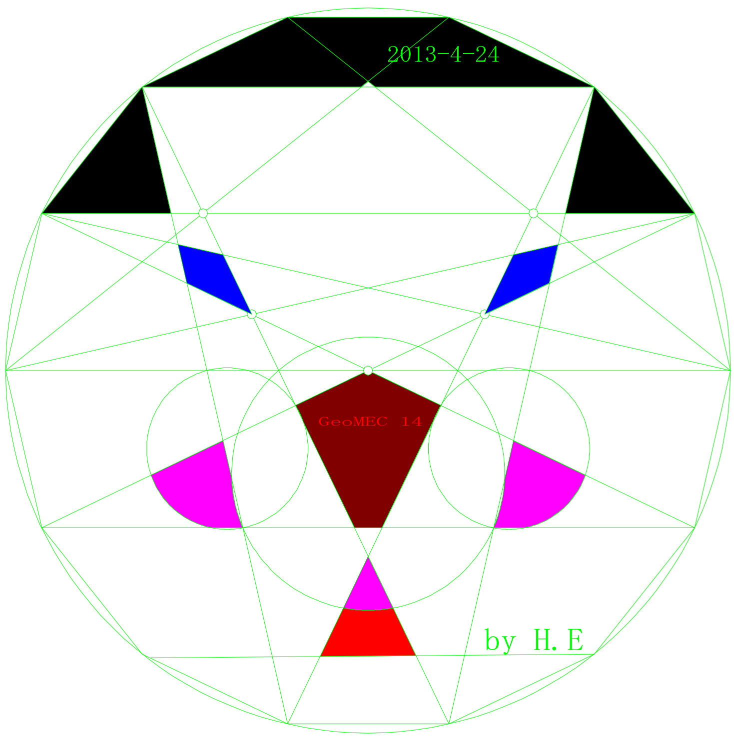
数学の本もいつしか眠くなる君に見せたし我らが姿
、

松下村塾前の伴侶と僕
2018 年春数学会中国四国支部会　山大参加の折

Thank you!!!



THANK YOU!!!



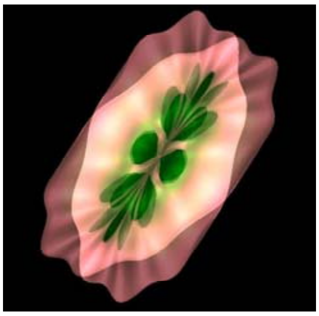
数学日記

geoMathe Diary 32th

IDEAL and Passion　No.5

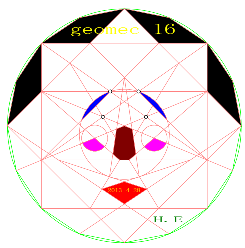
by Hirotaka Ebisui

Last Lief



by　M.I

Thank you!!!



contents

1."Last Lief"　Geomec 16
2. on Square　Rose　Star
3..Number Table　Peace
4.原始 Doval の定理

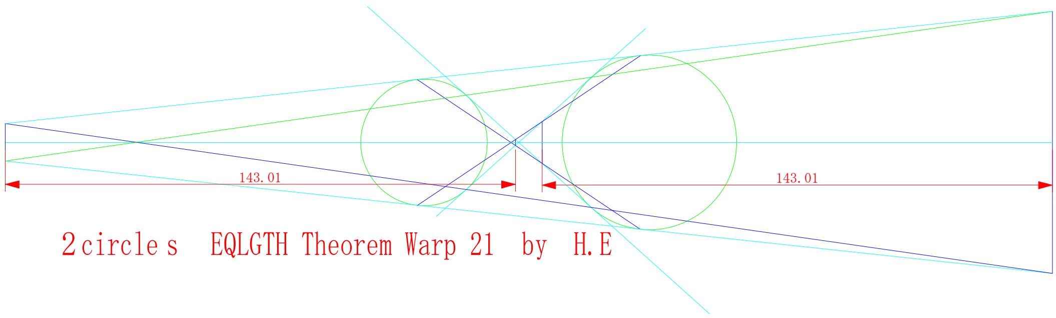
We shared therefore
We were.
Thanks a lot

Diary Memo

残念ながら、我々は、離れることになった。ありがとう。マリアさん。理想と情熱の企画は、これで最後。今後は、愛と理想を一人で、今まで通りことにする。悲しい定め。皆さんご勘弁を。今回の数表が、物語っているかも

寂しさや　芽生えた葉には　花の数

by　H.E



2circles　EQLGTH Theorem Warp 21　by　H.E

(HEX63)

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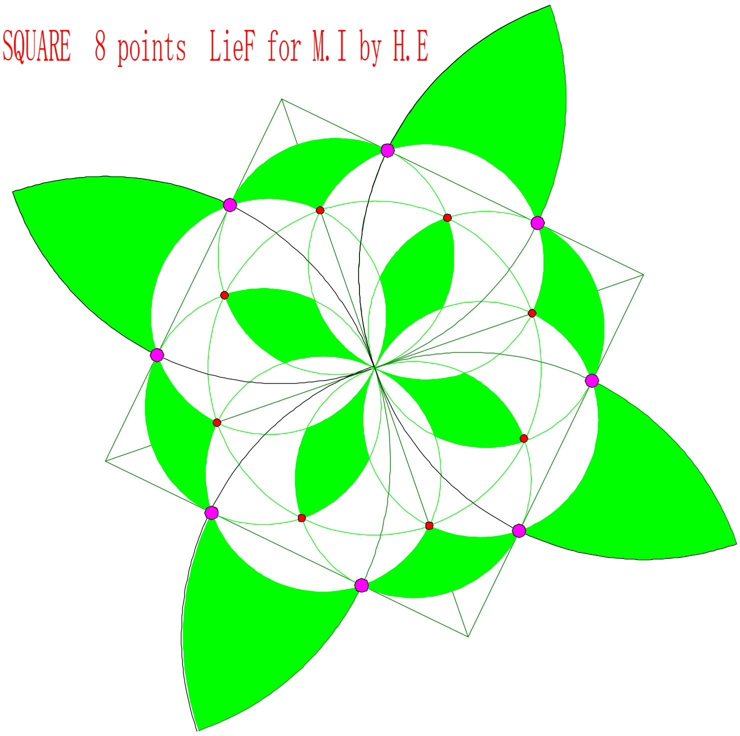
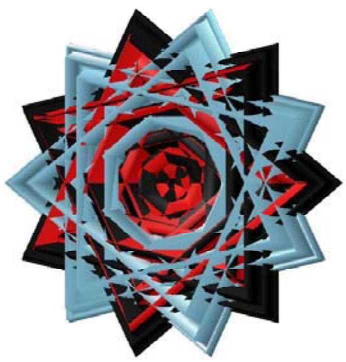
http:// hoval.blogzine.jp/

2013-４－２９

2.　 on　SQUARE　 THEOREM in Geometry　 b y　 H.E



CUT PI CUT STAR ROSE byH.E
4*cos(876548*u)*sin(cos(ℏ*v)) :
y := sin(876548*v)^e*cos(7654*v)^2 : z := 4*sin(876548*u)*sin(cos(ℏ*v)) :



３． Number Table "Peace"

```
> x := 0 : for p from 7 to 7 do for m from 2 to 100 do MHPH := 0 : MHP := 0 :for h from 1
    to 7  do MHPH := MHPH + m^h + (p)^h : MHP := MHP + m^h + (h)^p :od:
    if isprime(MHPH) then x := x + 1 : print([ seq([m]^j + [p]^j, j = 1 ..p)]
    = peace Sum prime(x)·[m]·[MHPH] )fi:if isprime(MHP) then x := x + 1 :
    print([ seq([m]^j + [j]^p, j = 1 ..p)] = peace Sum prime(x)·[m]·[MHP] )fi:od:od:
```

$$[[11], [4]^2+[7]^2, [4]^3+[7]^3, [4]^4+[7]^4, [4]^5+[7]^5, [4]^6+[7]^6, [4]^7+[7]^7] = \textit{peace Sum prime}(1)\ [4]\ [982643]$$

$$[[13], [6]^2+[7]^2, [6]^3+[7]^3, [6]^4+[7]^4, [6]^5+[7]^5, [7]^6+[6]^6, [6]^7+[7]^7] = \textit{peace Sum prime}(2)\ [6]\ [1296721]$$

$$[[9]+[1]^7, [9]^2+[2]^7, [9]^3+[3]^7, [9]^4+[4]^7, [9]^5+[5]^7, [9]^6+[6]^7, [9]^7+[7]^7] = \textit{peace Sum prime}(3)\ [9]\ [6581143]$$

$$[[27]+[1]^7, [27]^2+[2]^7, [27]^3+[3]^7, [27]^4+[4]^7, [27]^5+[5]^7, [27]^6+[6]^7, [27]^7+[7]^7] = \textit{peace Sum prime}(4)\ [27]\ [10863874783]$$

$$[[33]+[1]^7, [33]^2+[2]^7, [33]^3+[3]^7, [33]^4+[4]^7, [33]^5+[5]^7, [33]^6+[6]^7, [33]^7+[7]^7] = \textit{peace Sum prime}(5)\ [33]\ [43951469623]$$

$$[[45]+[1]^7, [45]^2+[2]^7, [45]^3+[3]^7, [45]^4+[4]^7, [45]^5+[5]^7, [45]^6+[6]^7, [45]^7+[7]^7] = \textit{peace Sum prime}(6)\ [45]\ [382163140999]$$

$$[[55], [48]^2+[7]^2, [48]^3+[7]^3, [48]^4+[7]^4, [48]^5+[7]^5, [48]^6+[7]^6, [48]^7+[7]^7] = \textit{peace Sum prime}(7)\ [48]\ [599560118863]$$

$$[[55]+[1]^7, [55]^2+[2]^7, [55]^3+[3]^7, [55]^4+[4]^7, [55]^5+[5]^7, [55]^6+[6]^7, [55]^7+[7]^7] = \textit{peace Sum prime}(8)\ [55]\ [1550629679759]$$

$$[[73], [66]^2+[7]^2, [66]^3+[7]^3, [66]^4+[7]^4, [66]^5+[7]^5, [66]^6+[7]^6, [66]^7+[7]^7] = \textit{peace Sum prime}(9)\ [66]\ [5539087211101]$$

$$[[103], [96]^2+[7]^2, [96]^3+[7]^3, [96]^4+[7]^4, [96]^5+[7]^5, [96]^6+[7]^6, [96]^7+[7]^7] = \textit{peace Sum prime}(10)\ [96]\ [75935746116991] \quad (1)$$

```
> x := 0 : for p from 1 to 7 do for m from 2 to 100 do MPH := 0 : MPHP := 0 :for h from 1
    to 7  do MPH := MPH + m^p + (p)^h : MPHP := MPHP + m^p + (h)^p :od:
    if isprime(MPH) then x := x + 1 : print([ seq([m]^p + [p]^j, j = 1 ..p)]
    = peace Sum prime(x)·[m]·[MPH] )fi:if isprime(MPHP) then x := x + 1 :
    print([ seq([m]^p + [j]^p, j = 1 ..p)] = peace Sum prime(x)·[m]·[MPHP] )fi:od:od:
```

$$[[3]^2+[2], [3]^2+[2]^2] = \textit{peace Sum prime}(1)\ [3]\ [317]$$

$$[[9]^2+[2], [9]^2+[2]^2] = \textit{peace Sum prime}(2)\ [9]\ [821]$$

$$[[33]^2+[2], [33]^2+[2]^2] = \textit{peace Sum prime}(3)\ [33]\ [7877]$$

$$[[51]^2+[2], [51]^2+[2]^2] = \textit{peace Sum prime}(4)\ [51]\ [18461]$$

$$[[69]^2+[2], [69]^2+[2]^2] = \textit{peace Sum prime}(5)\ [69]\ [33581]$$

$$[[81]^2+[2], [81]^2+[2]^2] = \textit{peace Sum prime}(6)\ [81]\ [46181]$$

$$[[4]^3+[3], [4]^3+[3]^2, [4]^3+[3]^3] = \textit{peace Sum prime}(7)\ [4]\ [3727]$$

$$[[8]^3+[3], [8]^3+[3]^2, [8]^3+[3]^3] = \textit{peace Sum prime}(8)\ [8]\ [6863]$$

$$[[26]^3+[3], [26]^3+[3]^2, [26]^3+[3]^3] = \textit{peace Sum prime}(9)\ [26]\ [126311]$$

$$[[28]^3+[3], [28]^3+[3]^2, [28]^3+[3]^3] = \textit{peace Sum prime}(10)\ [28]\ [156943]$$

$$[[40]^3+[3], [40]^3+[3]^2, [40]^3+[3]^3] = \textit{peace Sum prime}(11)\ [40]\ [451279]$$

$[[50]^3+[3], [50]^3+[3]^2, [50]^3+[3]^3] = peace\,Sum\,prime(12)\ [50]\ [878279]$

$[[76]^3+[3], [76]^3+[3]^2, [76]^3+[3]^3] = peace\,Sum\,prime(13)\ [76]\ [3076111]$

$[[80]^3+[3], [80]^3+[3]^2, [80]^3+[3]^3] = peace\,Sum\,prime(14)\ [80]\ [3587279]$

$[[7]^4+[4], [7]^4+[4]^2, [7]^4+[4]^3, [7]^4+[4]^4] = peace\,Sum\,prime(15)\ [7]\ [38651]$

$[[25]^4+[4], [25]^4+[4]^2, [25]^4+[4]^3, [25]^4+[4]^4] = peace\,Sum\,prime(16)\ [25]\ [2756219]$

$[[33]^4+[4], [33]^4+[4]^2, [33]^4+[4]^3, [33]^4+[4]^4] = peace\,Sum\,prime(17)\ [33]\ [8323291]$

$[[41]^4+[4], [41]^4+[4]^2, [41]^4+[4]^3, [41]^4+[4]^4] = peace\,Sum\,prime(18)\ [41]\ [19802171]$

$[[45]^4+[4], [45]^4+[4]^2, [45]^4+[4]^3, [45]^4+[4]^4] = peace\,Sum\,prime(19)\ [45]\ [28726219]$

$[[47]^4+[4], [47]^4+[4]^2, [47]^4+[4]^3, [47]^4+[4]^4] = peace\,Sum\,prime(20)\ [47]\ [34179611]$

$[[51]^4+[4], [51]^4+[4]^2, [51]^4+[4]^3, [51]^4+[4]^4] = peace\,Sum\,prime(21)\ [51]\ [47378251]$

$[[55]^4+[4], [55]^4+[4]^2, [55]^4+[4]^3, [55]^4+[4]^4] = peace\,Sum\,prime(22)\ [55]\ [64076219]$

$[[83]^4+[4], [83]^4+[4]^2, [83]^4+[4]^3, [83]^4+[4]^4] = peace\,Sum\,prime(23)\ [83]\ [332230091]$

$[[85]^4+[4], [85]^4+[4]^2, [85]^4+[4]^3, [85]^4+[4]^4] = peace\,Sum\,prime(24)\ [85]\ [365426219]$

$[[2]^5+[5], [2]^5+[5]^2, [2]^5+[5]^3, [2]^5+[5]^4, [2]^5+[5]^5] = peace\,Sum\,prime(25)\ [2]\ [97879]$

$[[12]^5+[5], [12]^5+[5]^2, [12]^5+[5]^3, [12]^5+[5]^4, [12]^5+[5]^5] = peace\,Sum\,prime(26)\ [12]\ [1839479]$

$[[24]^5+[5], [24]^5+[5]^2, [24]^5+[5]^3, [24]^5+[5]^4, [24]^5+[5]^5] = peace\,Sum\,prime(27)\ [24]\ [55836023]$

$[[26]^5+[5], [26]^5+[5]^2, [26]^5+[5]^3, [26]^5+[5]^4, [26]^5+[5]^5] = peace\,Sum\,prime(28)\ [26]\ [83267287]$

$[[36]^5+[5], [36]^5+[5]^2, [36]^5+[5]^3, [36]^5+[5]^4, [36]^5+[5]^5] = peace\,Sum\,prime(29)\ [36]\ [423360887]$

$[[48]^5+[5], [48]^5+[5]^2, [48]^5+[5]^3, [48]^5+[5]^4, [48]^5+[5]^5] = peace\,Sum\,prime(30)\ [48]\ [1783725431]$

$[[56]^5+[5], [56]^5+[5]^2, [56]^5+[5]^3, [56]^5+[5]^4, [56]^5+[5]^5] = peace\,Sum\,prime(31)\ [56]\ [3855220087]$

$[[74]^5+[5], [74]^5+[5]^2, [74]^5+[5]^3, [74]^5+[5]^4, [74]^5+[5]^5] = peace\,Sum\,prime(32)\ [74]\ [15533144023]$

$[[86]^5+[5], [86]^5+[5]^2, [86]^5+[5]^3, [86]^5+[5]^4, [86]^5+[5]^5] = peace\,Sum\,prime(33)\ [86]\ [32929988887]$

$[[5]^6+[6], [5]^6+[6]^2, [5]^6+[6]^3, [5]^6+[6]^4, [5]^6+[6]^5, [5]^6+[6]^6]$

$= peace\,Sum\,prime(34)\ [5]\ [445297]$

$[[9]^6+[1]^6, [9]^6+[2]^6, [9]^6+[3]^6, [9]^6+[4]^6, [9]^6+[5]^6, [9]^6+[6]^6]$

$= peace\,Sum\,prime(35)\ [9]\ [3904907]$

$[[21]^6+[1]^6, [21]^6+[2]^6, [21]^6+[3]^6, [21]^6+[4]^6, [21]^6+[5]^6, [21]^6+[6]^6]$

$= peace\,Sum\,prime(36)\ [21]\ [600547667]$

$[[25]^6+[6], [25]^6+[6]^2, [25]^6+[6]^3, [25]^6+[6]^4, [25]^6+[6]^5, [25]^6+[6]^6]$

$= peace\,Sum\,prime(37)\ [25]\ [1709320297]$

$[[29]^6+[6], [29]^6+[6]^2, [29]^6+[6]^3, [29]^6+[6]^4, [29]^6+[6]^5, [29]^6+[6]^6]$

$= peace\,Sum\,prime(38)\ [29]\ [4164099169]$

$[[35]^6+[6], [35]^6+[6]^2, [35]^6+[6]^3, [35]^6+[6]^4, [35]^6+[6]^5, [35]^6+[6]^6]$

$= peace\,Sum\,prime(39)\ [35]\ [12868195297]$

$[[41]^6+[6], [41]^6+[6]^2, [41]^6+[6]^3, [41]^6+[6]^4, [41]^6+[6]^5, [41]^6+[6]^6]$

$= peace\,Sum\,prime(40)\ [41]\ [33251065609]$

$[[49]^6+[6], [49]^6+[6]^2, [49]^6+[6]^3, [49]^6+[6]^4, [49]^6+[6]^5, [49]^6+[6]^6]$

$= peace\,Sum\,prime(41)\ [49]\ [96889346329]$

$[[51]^6+[1]^6, [51]^6+[2]^6, [51]^6+[3]^6, [51]^6+[4]^6, [51]^6+[5]^6, [51]^6+[6]^6]$

$= peace\,Sum\,prime(42)\ [51]\ [123174199427]$

$[[59]^6+[6], [59]^6+[6]^2, [59]^6+[6]^3, [59]^6+[6]^4, [59]^6+[6]^5, [59]^6+[6]^6]$

$= peace\,Sum\,prime(43)\ [59]\ [295264071409]$

$[[63]^6+[1]^6, [63]^6+[2]^6, [63]^6+[3]^6, [63]^6+[4]^6, [63]^6+[5]^6, [63]^6+[6]^6]$

$= peace\,Sum\,prime(44)\ [63]\ [437664700283]$

$[[69]^6+[1]^6, [69]^6+[2]^6, [69]^6+[3]^6, [69]^6+[4]^6, [69]^6+[5]^6, [69]^6+[6]^6]$

$= peace\,Sum\,prime(45)\ [69]\ [755427326387]$

$[[95]^6+[6], [95]^6+[6]^2, [95]^6+[6]^3, [95]^6+[6]^4, [95]^6+[6]^5, [95]^6+[6]^6]$

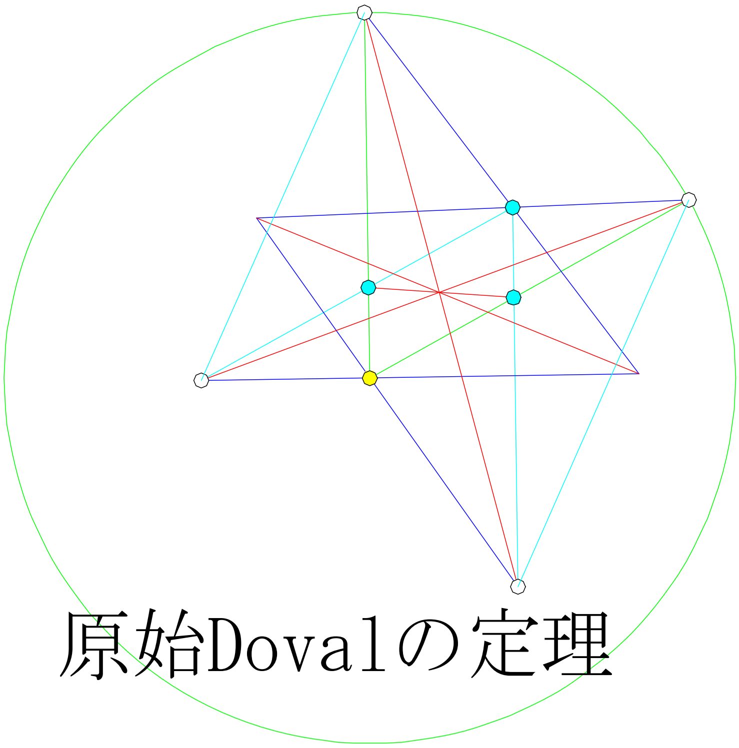
$= peace\,Sum\,prime(46)\ [95]\ [5145643570297]$

$[[99]^6+[1]^6, [99]^6+[2]^6, [99]^6+[3]^6, [99]^6+[4]^6, [99]^6+[5]^6, [99]^6+[6]^6]$ **(2)**

$= peace\,Sum\,prime(47)\ [99]\ [6590361230627]$

>

4　原始動張るの定理



原始Dovalの定理

数学日記

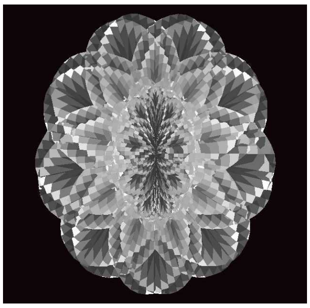
geoMathe Diary　33th

IDEAL and Passion　No.6

Hirota-k-a:key author, Mar-i-a:interpritor author

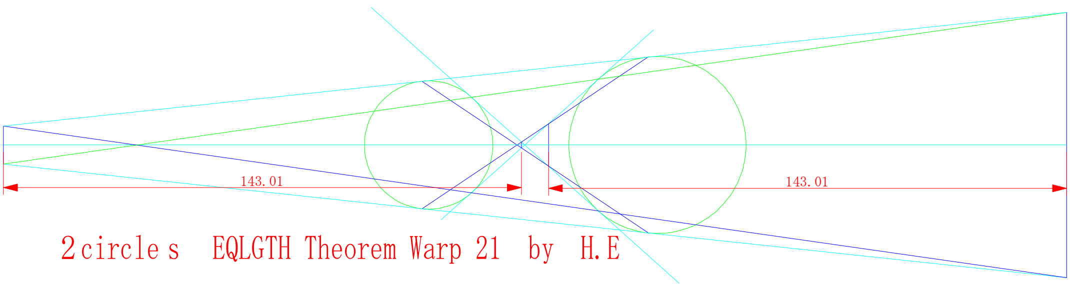
Ebisui :　Editor,　　Intagliata :Imager

Peace



contents

4/30　筆者を以上のように決めた。
32th は、都合上一人で、創った。
33th からまた共同作業がはじまった。
このページは毎回、単独で、前広告として
オープンする。２９ｔｈで書いたスチック
メモリーが出てきた.やれやれ。
今回から、私が、いつもここを担当するこ
とにする。表題の３Ｄは、私も創りたいの
で交代で創る.IMAGER が上であるが。(H.E)



2circle s　EQLGTH Theorem Warp 21　by　H.E

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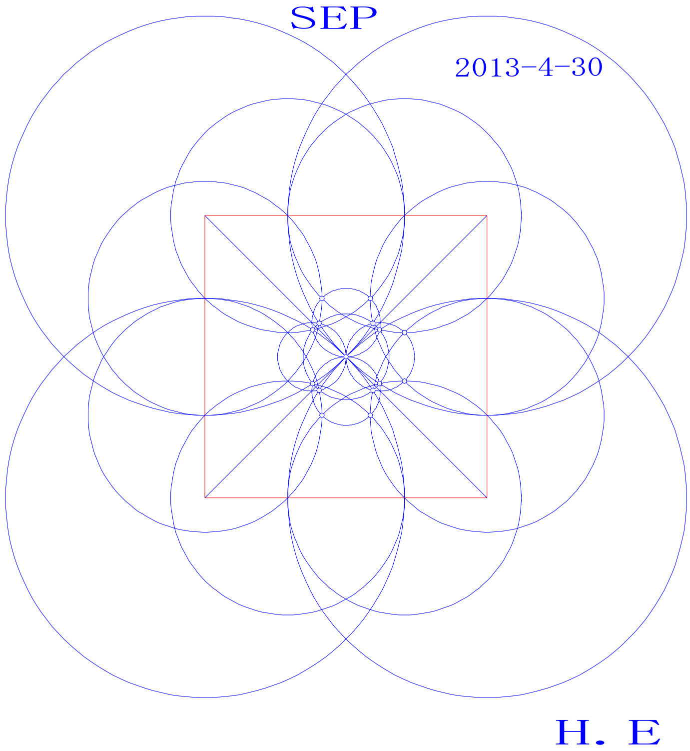
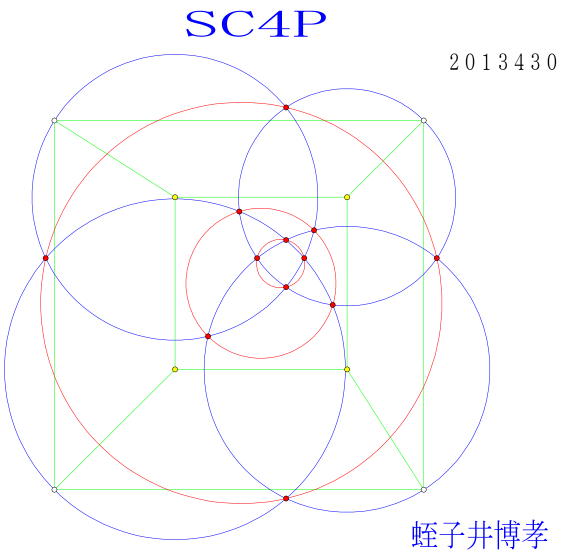
http://hoval.blogzine.jp/geomathe_garden_by_85/

2013 5-5

2　On Square Theorem In Geometry

THANK　YOU！！！





3　NUMTAB　DIGIT　NUMBER　Probrem　DNP　11927（31cn/88　26th）　by　H.E

> # DIGIT NUMBER PI EXP PI-EXP by H.E:

[1] DIGIT NUMBER

$$\left[\Pi\left(1_{th_1} ZpDg\right)=1, \text{"-"}, EXP\left(1_{th}+[1]\ zeropoint\ digits\right)=7\right]=-6$$
$$\left[\Pi\left(2_{th_1} ZpDg\right)=4, \text{"-"}, EXP\left(2_{th}+[1]\ zeropoint\ digits\right)=1\right]=3$$
$$[th\ prime(\Pi-EXP)]=3$$
$$\left[\Pi\left(3_{th_1} ZpDg\right)=1, \text{"-"}, EXP\left(3_{th}+[1]\ zeropoint\ digits\right)=8\right]=-7$$
$$\left[\Pi\left(4_{th_1} ZpDg\right)=5, \text{"-"}, EXP\left(4_{th}+[1]\ zeropoint\ digits\right)=2\right]=3$$
$$[3\ th\ prime(\Pi-EXP)]=3$$
$$\left[\Pi\left(5_{th_1} ZpDg\right)=9, \text{"-"}, EXP\left(5_{th}+[1]\ zeropoint\ digits\right)=8\right]=1$$
$$\left[\Pi\left(6_{th_1} ZpDg\right)=2, \text{"-"}, EXP\left(6_{th}+[1]\ zeropoint\ digits\right)=1\right]=1$$
$$\left[\Pi\left(7_{th_1} ZpDg\right)=6, \text{"-"}, EXP\left(7_{th}+[1]\ zeropoint\ digits\right)=8\right]=-2$$
$$\left[\Pi\left(8_{th_1} ZpDg\right)=5, \text{"-"}, EXP\left(8_{th}+[1]\ zeropoint\ digits\right)=2\right]=3$$
$$[7\ th\ prime(\Pi-EXP)]=3$$
$$\left[\Pi\left(9_{th_1} ZpDg\right)=3, \text{"-"}, EXP\left(9_{th}+[1]\ zeropoint\ digits\right)=8\right]=-5$$
$$\left[\Pi\left(10_{th_1} ZpDg\right)=5, \text{"-"}, EXP\left(10_{th}+[1]\ zeropoint\ digits\right)=4\right]=1 \quad (1)$$

> --

[2] DIGIT NUMBER

$$\left[\Pi\left(1_{th_2} ZpDg\right)=14, \text{"-"}, EXP\left(1_{th}+[2]\ zeropoint\ digits\right)=71\right]=-57$$
$$\left[\Pi\left(3_{th_2} ZpDg\right)=15, \text{"-"}, EXP\left(3_{th}+[2]\ zeropoint\ digits\right)=82\right]=-67$$
$$\left[\Pi\left(5_{th_2} ZpDg\right)=92, \text{"-"}, EXP\left(5_{th}+[2]\ zeropoint\ digits\right)=81\right]=11$$
$$[4\ th\ prime(\Pi-EXP)]=11$$
$$\left[\Pi\left(7_{th_2} ZpDg\right)=65, \text{"-"}, EXP\left(7_{th}+[2]\ zeropoint\ digits\right)=82\right]=-17$$
$$\left[\Pi\left(9_{th_2} ZpDg\right)=35, \text{"-"}, EXP\left(9_{th}+[2]\ zeropoint\ digits\right)=84\right]=-49$$
$$\left[\Pi\left(11_{th_2} ZpDg\right)=89, \text{"-"}, EXP\left(11_{th}+[2]\ zeropoint\ digits\right)=59\right]=30$$
$$\left[\Pi\left(13_{th_2} ZpDg\right)=79, \text{"-"}, EXP\left(13_{th}+[2]\ zeropoint\ digits\right)=4\right]=75$$
$$\left[\Pi\left(15_{th_2} ZpDg\right)=32, \text{"-"}, EXP\left(15_{th}+[2]\ zeropoint\ digits\right)=52\right]=-20$$
$$\left[\Pi\left(17_{th_2} ZpDg\right)=38, \text{"-"}, EXP\left(17_{th}+[2]\ zeropoint\ digits\right)=35\right]=3$$
$$[16\ th\ prime(\Pi-EXP)]=3$$

[10] *DIGIT NUMBER*

[11] *DIGIT NUMBER*

[12] *DIGIT NUMBER*

[13] *DIGIT NUMBER*

$$\left[DIGIT\ NUMBER\left(\Pi - EXP\right)^{(37\ cn)}_{Prime(66)\ th}\right] = 3739775932661$$

[14] *DIGIT NUMBER*

[15] *DIGIT NUMBER*

[16] *DIGIT NUMBER*

$$\left[DIGIT\ NUMBER\left(\Pi - EXP\right)^{(38\ cn)}_{Prime(81)\ th}\right] = 4056652646816951$$

[17] *DIGIT NUMBER*

[18] *DIGIT NUMBER*

$$\left[DIGIT\ NUMBER\left(\Pi - EXP\right)^{(39\ cn)}_{Prime(19)\ th}\right] = 102355911926840387$$

[19] *DIGIT NUMBER*

[20] *DIGIT NUMBER*

[21] *DIGIT NUMBER*

[22] *DIGIT NUMBER*

[23] *DIGIT NUMBER*

[24] *DIGIT NUMBER*

[25] *DIGIT NUMBER*

[26] *DIGIT NUMBER*

[27] *DIGIT NUMBER*

[28] *DIGIT NUMBER*

[29] *DIGIT NUMBER*

$$\left[DIGITNUMBER\left(\Pi - EXP\right)^{(19\ cn)}_{Prime(75)\ th}\right] = 3$$

$$\left[\Pi\left(76_{th_1} ZpDg\right) = 2, "-", EXP\left(76_{th} + [1]\ zeropoint\ digits\right) = 5\right] = -3$$

$$\left[\Pi\left(77_{th_1} ZpDg\right) = 0, "-", EXP\left(77_{th} + [1]\ zeropoint\ digits\right) = 4\right] = -4$$

$$\left[\Pi\left(78_{th_1} ZpDg\right) = 8, "-", EXP\left(78_{th} + [1]\ zeropoint\ digits\right) = 7\right] = 1$$

$$\left[\Pi\left(79_{th_1} ZpDg\right) = 9, "-", EXP\left(79_{th} + [1]\ zeropoint\ digits\right) = 5\right] = 4$$

$$\left[\Pi\left(80_{th_1} ZpDg\right) = 9, "-", EXP\left(80_{th} + [1]\ zeropoint\ digits\right) = 9\right] = 0$$

$$\left[\Pi\left(81_{th_1} ZpDg\right) = 8, "-", EXP\left(81_{th} + [1]\ zeropoint\ digits\right) = 4\right] = 4$$

$$\left[\Pi\left(82_{th_1} ZpDg\right) = 6, "-", EXP\left(82_{th} + [1]\ zeropoint\ digits\right) = 5\right] = 1$$

$$\left[\Pi\left(83_{th_1} ZpDg\right) = 2, "-", EXP\left(83_{th} + [1]\ zeropoint\ digits\right) = 7\right] = -5$$

$$\left[\Pi\left(84_{th_1} ZpDg\right) = 8, "-", EXP\left(84_{th} + [1]\ zeropoint\ digits\right) = 1\right] = 7$$

$$\left[DIGITNUMBER\left(\Pi - EXP\right)^{(20\ cn)}_{Prime(84)\ th}\right] = 7$$

$$\left[\Pi\left(85_{th_1} ZpDg\right) = 0, "-", EXP\left(85_{th} + [1]\ zeropoint\ digits\right) = 3\right] = -3$$

$$\left[\Pi\left(86_{th_1} ZpDg\right) = 3, "-", EXP\left(86_{th} + [1]\ zeropoint\ digits\right) = 8\right] = -5$$

$$\left[\Pi\left(87_{th_1} ZpDg\right) = 4, "-", EXP\left(87_{th} + [1]\ zeropoint\ digits\right) = 2\right] = 2$$

$$\left[DIGITNUMBER\left(\Pi - EXP\right)^{(21\ cn)}_{Prime(87)\ th}\right] = 2$$

$$\left[\Pi\left(88_{th_1} ZpDg\right) = 8, "-", EXP\left(88_{th} + [1]\ zeropoint\ digits\right) = 1\right] = 7$$

$$\left[DIGITNUMBER\left(\Pi - EXP\right)^{(22\ cn)}_{Prime(88)\ th}\right] = 7$$

$$\left[\Pi\left(89_{th_1} ZpDg\right) = 2, "-", EXP\left(89_{th} + [1]\ zeropoint\ digits\right) = 7\right] = -5$$

[2] *DIGITNUMBER*

$$\left[\Pi\left(1_{th_2} ZpDg\right) = 14, "-", EXP\left(1_{th} + [2]\ zeropoint\ digits\right) = 71\right] = -57$$

$$\left[\Pi\left(3_{th_2} ZpDg\right) = 15, "-", EXP\left(3_{th} + [2]\ zeropoint\ digits\right) = 82\right] = -67$$

$$\left[\Pi\left(5_{th_2} ZpDg\right) = 92, "-", EXP\left(5_{th} + [2]\ zeropoint\ digits\right) = 81\right] = 11$$

$$\left[DIGITNUMBER\left(\Pi - EXP\right)^{(23\ cn)}_{Prime(5)\ th}\right] = 11$$

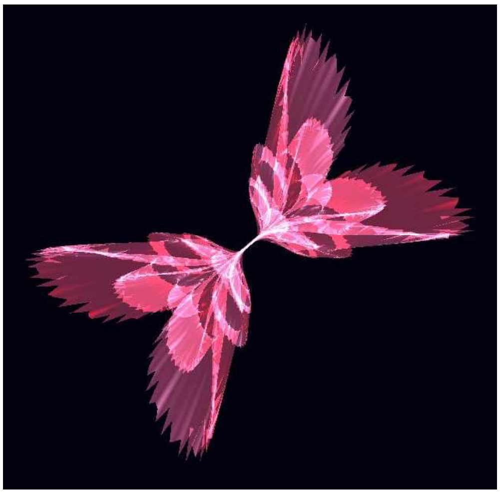
$$\left[\Pi\left(7_{th_2} ZpDg\right) = 65, "-", EXP\left(7_{th} + [2]\ zeropoint\ digits\right) = 82\right] = -17$$

$$\left[\Pi\left(9_{th_2} ZpDg\right) = 35, "-", EXP\left(9_{th} + [2]\ zeropoint\ digits\right) = 84\right] = -49$$

4　３Ｄ EQG by M.I

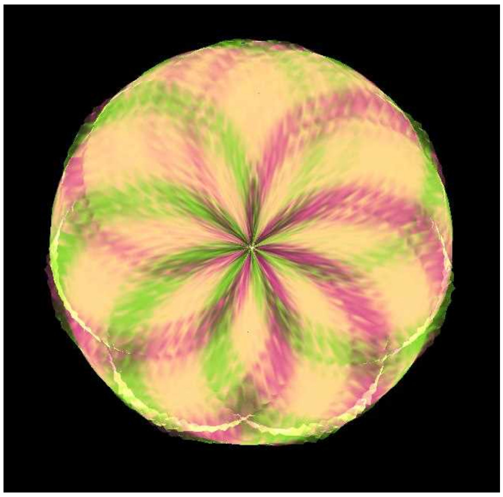
GLASSFLOWER

X=pi^(1+ 0.6*cos(7*u+5*v)*cos(4*u+3*v))
Y=sin(u)*sin(v)^3
Z=(1+ 0.6*cos(u))*sin(v)



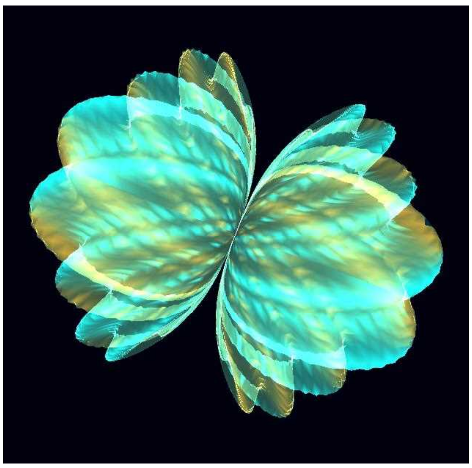
BALL FLOWER1

X=0.012*pi^cos(cos(29*u+20*v))
*cos(18*v+17*u)　*pi^cos(7*u+5*v)
*cos(4*u+3*v)
Y=sin(u)*sin(v)
Z=cos(u)*sin(v)



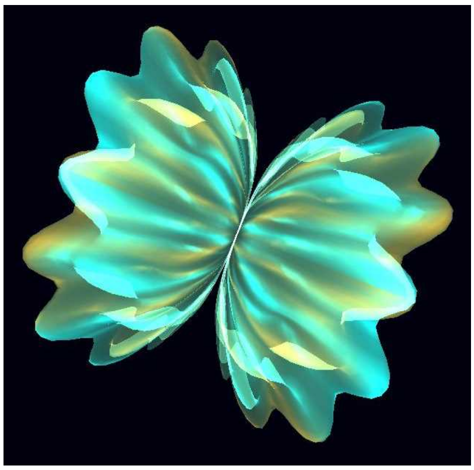
BUTTERFLYFLOWER

x ＝(0.6+ 0.6*cos(7*u+5*v)*0.8*cos(4*u+3*v))^2
y ＝ sin(u)*sin(v)
z ＝(0.6+ 0.6*cos(u))*sin(v)^3



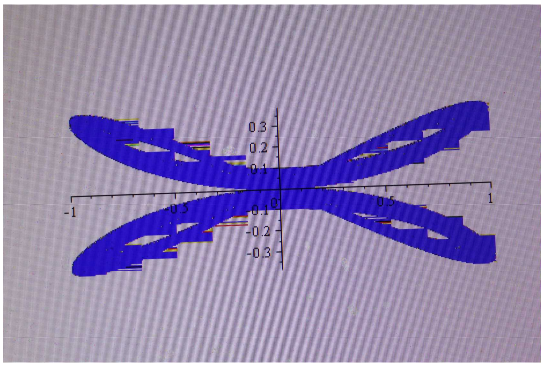
BUTTERFLYFLOWER1

x ＝(0.6+ 0.6*cos(7*u-5*v)*0.8*cos(4*u+3*v))^2
y ＝　sin(u)*sin(v)
z ＝　(0.6+ 0.6*cos(u))*sin(v)^3

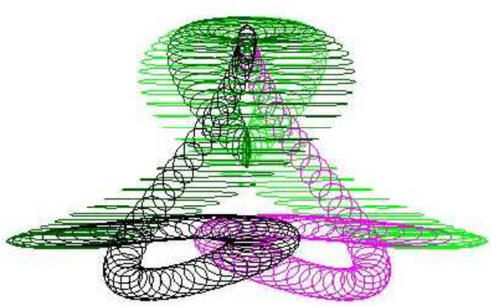


5　２ D by H.E

DNP DNA 11927

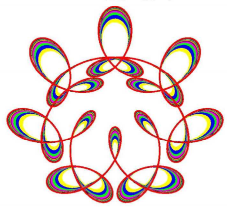


Pachikuri DATE SUIKA by H.E



蛭子井博孝作（P.21/80）
2012-9-16 Pachikuri 台風雲のいろいろを思いながら

Pachikuri Date 916 台風神心の表情　by H.E



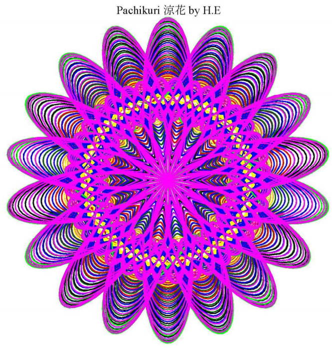
BGT = "09-16 (11:51:09 AM)", [21], HEB = [5, 2, 1]

$$X = \sin\left(\frac{229}{4}t\right) + \sin(229t)\cos\left(\frac{1145}{2}t\right)\cos\left(\cos\left(\frac{t}{1+t}\right)\right)$$

$$Y = \cos\left(\frac{229}{4}t\right) + \cos(229t)\cos\left(\frac{1145}{2}t\right)\cos\left(\cos\left(\frac{t}{1+t}\right)\right)$$

$\left[t = 0..2\pi, st = \frac{1}{10}\right]$, *蛭子井博孝*

Pachikuri 涼花 by H.E



BGT = "10-08 (04:44:40 PM)", No = [199], HEB = [7, 5, 2, 18]

$$X = \sin(427t) + \cos(1098t)\sin(427t)\cos(2196t)\sin(\tan(\cos(\cos(t) + \sin(t))))$$

$$Y = \cos(427t) + \cos(1098t)\cos(427t)\cos(2196t)\sin(\tan(\cos(\cos(t) + \sin(t))))$$

$\left[t = 0..2\pi, st = \frac{1}{10}\right]$, *蛭子井博孝*

6　　NUMBER

数について、日頃思っていることを書く。人には、誕生日がある

たとえば、4 月 20 日と 7 月 17 日　7 - 4 =20-17=3　相性がいいようだ。

　この数には、こんな関係もある。

7^3*X+17^3*(56+n) = 4^3*6+20^3*(34+n)

数表を数式処理ソフトで簡単にできる時代。4, 5 節にある数からできる EQG のいろいろをご覧下さい。数の世界は、1 兆桁の円周率を始め、1+2+3=6 の完全数、2^2^2+1=17 のフェルマ素数をその他いろいろである。1+1=2 の時代が 1+1=0 の時代に移り世界が変わりだした。その世界の不思議を皆さんとともに味わいたい

　ここに 2 人の画像を紹介させてもらいます.誕生日と表情に関係があるかご覧下さい。

I want to write what i think now about numbers. People have theiir bithday numbers.

for Example, 4 月 20 日と 7 月 17 日　7 - 4 =20-17=3　this may be nice combination

about this following relation exsist

7^3*X+17^3*(56+n) = 4^3*6+20^3*(34+n)

now we can easyly make numTable useing nemerical soft. Let's see EQG by numbers in Section 4,5. In number field there are 10^12 digits Pi, 1+2+3=6 perfect number ,2^2^2+1=17 Ferma prime.etc.The history changes from 1+1=2 to 1+1=0

we want to Enjoy the world of number with yo.

we show two photos. Waht do you think about the relaion between our face detail and birth day numbers. Enjoy numbers.　We are a little old .You can find the ages number.

Numeri　　　　　by　M.I

Trattare dei numeri non è semplice: ci vorrebbero fiumi di parole, senza tuttavia riuscire ad essere convincenti ed esaustivi. Quello che è certo è che essi sono dappertutto e servono a rappresentare in modo oggettivo la realtà che ci circonda. Lo diceva anche Pitagora, per il quale l' arché è nel numero, o meglio nell' uno, che è presente in tutti i numeri, anche nel senso di unicità, poiché ogni numero è unico, in quanto diverso da ogni altro.

I numeri, fin dall' antichità, hanno sempre affascinato l' uomo, che ne ha colto il senso di mistero, come dimostrano la cabala e la numerologia. Ed oggi ancor più lo attraggono, perché, come qualcuno ha detto, "i numeri possono arrivare a guidare perfino le nostre idee".

E che dire della loro bellezza? Il mondo dei numeri è un posto meraviglioso, variopinto e divertente, che purtroppo pochi privilegiati possono visitare. Un mondo sicuramente affascinante per Archimede, che nella sua opera "Arenario"dimostra di sfidare pregiudizi e limiti del pensiero a lui contemporaneo e riesce a dare nome a grandi numeri capaci di contare, non solo i granelli di sabbia di Siracusa, ma anche molteplicità grandi quanto si vuole, con l' implicazione del concetto di infinito potenziale.

Che dire del legame dei numeri, come quelli di Fibonacci, con la bellezza di molte forme esistenti in natura? E del numero aureo, considerato fin dalla sua scoperta, la rappresentazione della legge universale dell' armonia, l' espressione matematica della bellezza e dell' eleganza? Non solo in architettura, ma anche in musica, come nelle fughe di Bach o nelle sonate di Mozart, per trionfare nella Sagra della Primavera di Strawinski.

Affascinante il legame di taluni numeri tra loro, come "e, i, π, 1 e 0 " nell' identità di Eulero, la più bella della matematica.

C' è poi il fascino della teoria dei numeri primi, così intrigante che spinge oltre ogni limite la passione di tanti matematici, che si avventurano alla ricerca di numeri primi sempre più grandi e di eventuali leggi e proprietà che ne regolano la distribuzione.

Grandi passi sono stati compiuti dai vari matematici della Storia, e, grazie anche allo sviluppo dei computers e al continuo aggiornamento, oggi è stato possibile mostrare il più grande numero primo trovato finora.

In English

Numbers

Treat of numbers is not simple: it would take many words, but was unable to be convincing and exhaustive. What is certain is that they are everywhere and serve to represent the objective reality that surrounds us. It also said Pythagoras, for which the arché is in the number, or better in one, which is present in all the numbers, even in the sense of oneness, since each number is unique in that unlike any other.

The numbers, since ancient times, have always fascinated man, who has grasped the sense of mystery, as evidenced by the cabal and numerology. And today even more attract him, because, as someone said, "the numbers may even get to drive our ideas."

And what of their beauty? The world of numbers is wonderful, colorful and fun, which unfortunately privileged few can visit. A world certainly fascinating to Archimedes, who in his work "Arenario" proves to challenge prejudices and limitations of thought of his time and manages to give name to large numbers able to count not only the grains of sand in Syracuse, but also large multiplicity as it was, with the implication of the concept of potential infinite.

What about the relationship of numbers, such as Fibonacci, with the beauty of many forms that exist in nature? And the golden number, considered since its discovery, the representation of the universal law of harmony, the mathematical expression of beauty and elegance? Not only in architecture but also in music, as in Bach fugues or sonatas of Mozart, to triumph in the Rite of Spring by Stravinsky.

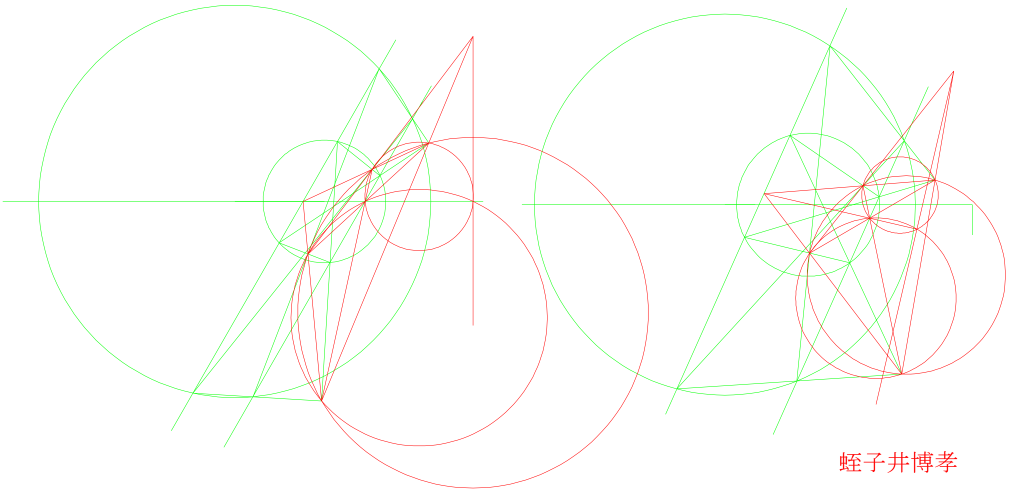
Charming the link of certain numbers between them, such as "e, i, π, 1, and 0" in the identity of Euler, the most beautiful of mathematics.

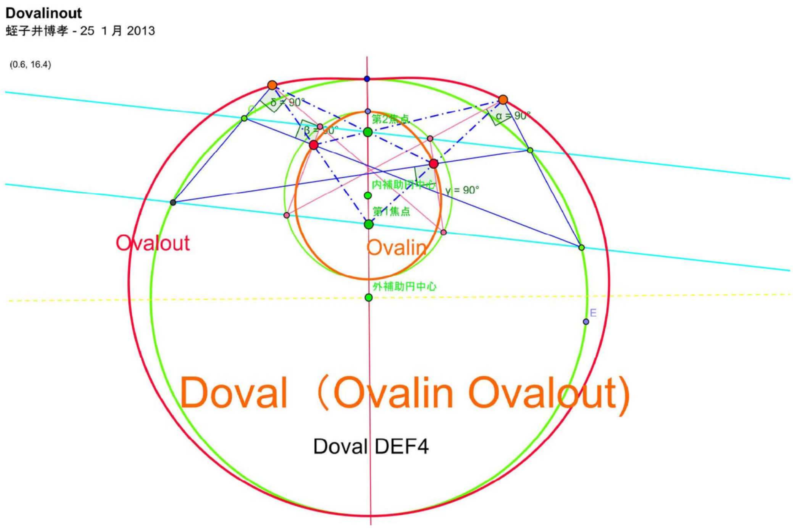
Then there is the charm of the theory of prime numbers, so intriguing that pushes beyond all the passion of many mathematicians, who venture out in search of ever larger primes and any laws and properties that govern thejr distribution.

Great strides have been made by various mathematicians of history, and, thanks to the development of computers and continuous updating, now it was possible to show the largest prime number found so far

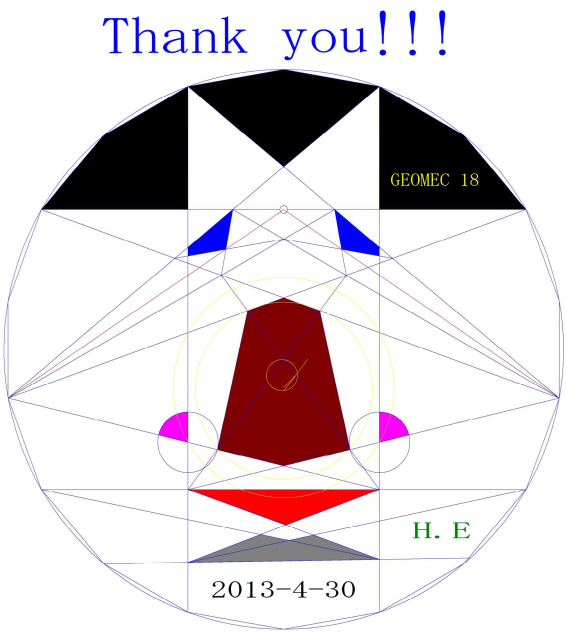
7　DOVAL

Doval and primitive Doval Property Compositions





8　GEOMEC 18



Edit Summery

We are happy to finish our HMD(Hirotaka Maria Mathe Diary).

Just, Enjoy Numbers　and EQG.

See you in next 34th. If we can,we make HMD.

Thank you!!!　　　　　　　　　　by H.E（5-2）

数学日記

geoMathe Diary　34th

IDEAL and Passion　No. 7

Hirota-k-a:key author, Mar-i-a:interpritor author
Ebisui：　Editor,　　Intagliata :Imager

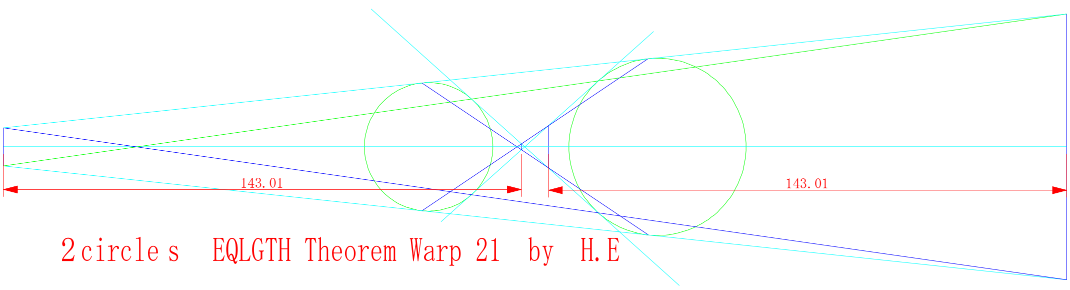
Star

Pris H.M.-Star (meq) byH.E

by　H.E

contents

５/２　｛ｐ １｝＋２＝｛ｐ｝を考えついた.この式を満たす、双子素数は、無限個ある予想の証明が、この式に含まれているかも。　３＋２＝５　５＋２＝７が具体例。今回は、ある性質を持つ 2 連続素数表を創る。また、3D も、いろいろ工夫してゆく。平面の記事は、どんなものになるか。基本を考察する。連休 5/3、雨が上がり 、日が照っている。新緑がみずみずしい。(H.E)

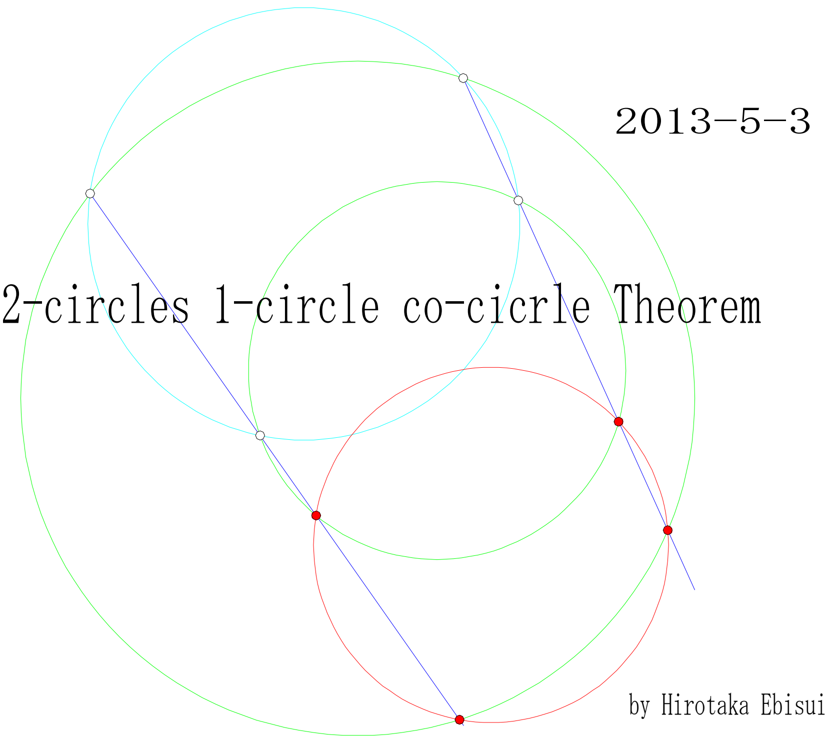


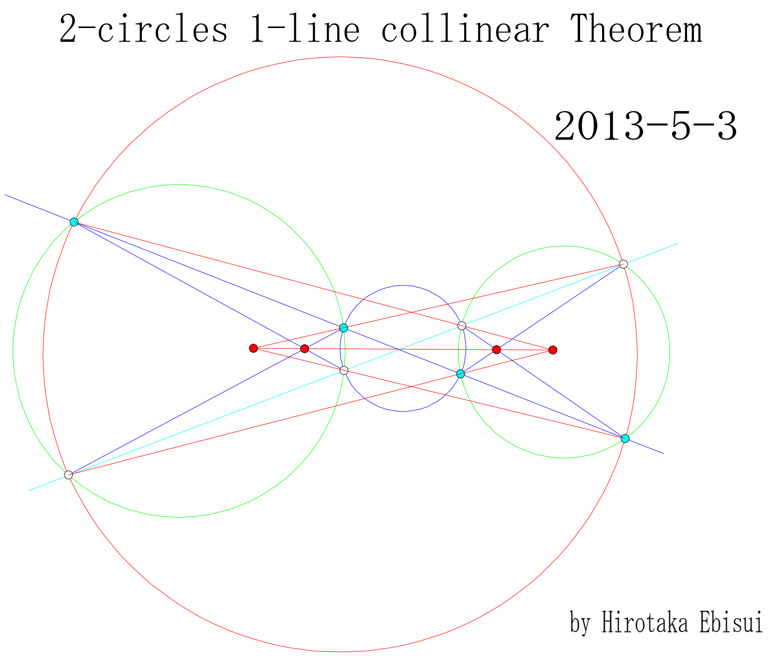
2circle s　EQLGTH Theorem Warp 21　by　H.E

卵形線研究センター
http://hoval.blogzine.jp/geomathe_garden_by_85/

2013 5-5

2　On 2 circles　Theorem In Geometry





3　NUMTAB　"Prime Average is prime":

PAP[1,2];[1,4]are found [1,3]is not found by　H.E

> # Number Table $\left[P1, prime\ ave\ Prime\left(\frac{P1+P2}{2}\right), prime\ k\ jou\ ave\ Prime\left(\frac{P1^k+P2^k}{2}\right), P2\right]$ $(k=2,4)$ **by** $H.E$:

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AVE primes SET(11) [[5], avep [71], $avep^2$ [9397], [137]]
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AVE primes SET(8) [[31], avep [37], $avep^4$ [2171161], [43]]
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AVE primes SET(10) [[47], avep [59], $avep^4$ [15145681], [71]]
AVE primes SET(11) [[67], avep [73], $avep^4$ [29550601], [79]]　**(2)**

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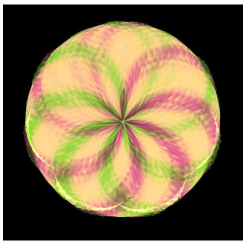
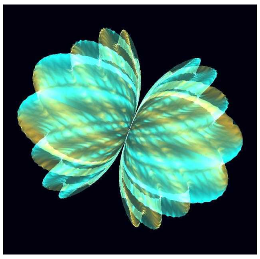
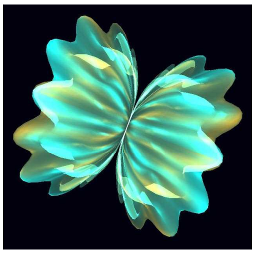
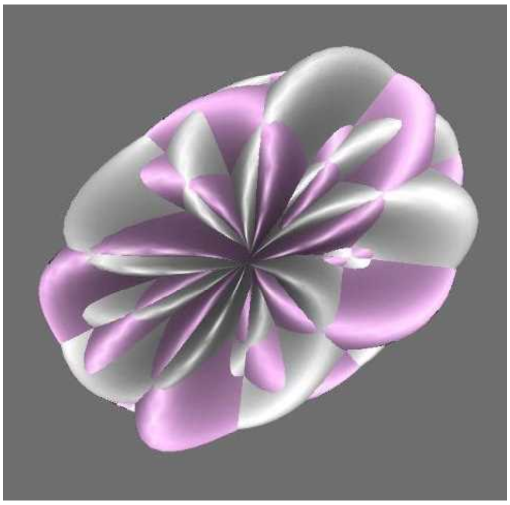
>

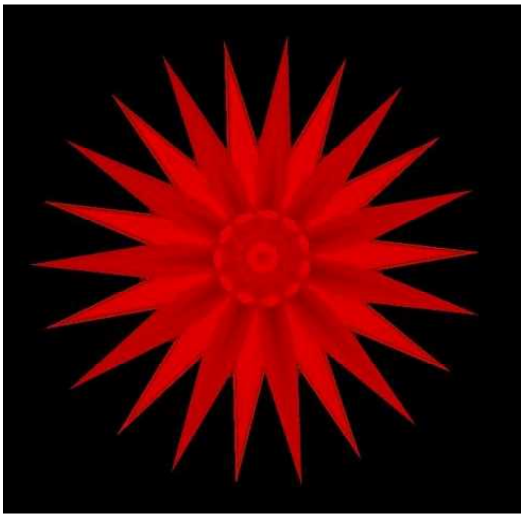
4　３ D EQG by M.I

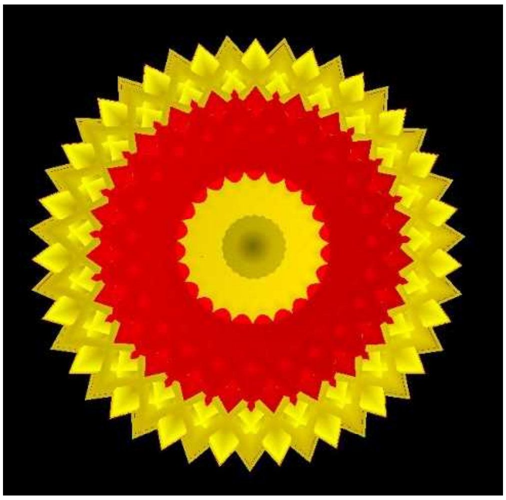
x=0.65*(sin(5*u-3*v)+0.9*cos(2*u)^2)*1.9*cos(v)
y=2.98*sin(u)*0.82*sin(v)
z=0.56*(sin(u)-2.9*cos(u))*1.54*sin(v)



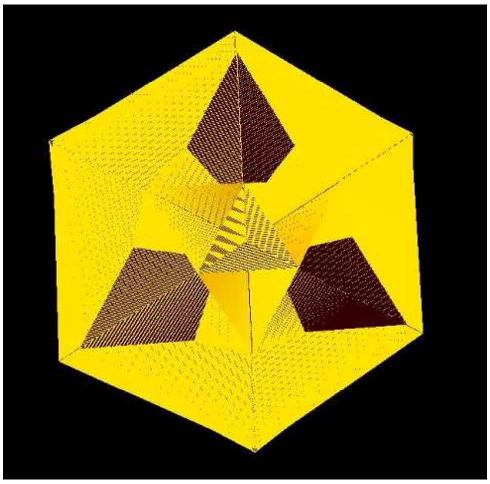
XYZ



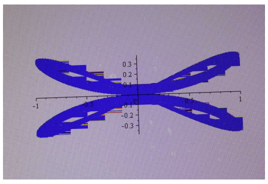
XYZ :x=7* cos(16* u)* sin(31187 *v)
y= sin(16* v)　*cos(31187 *v)
z=7 *sin(16 *u)　*sin(31187 *v)

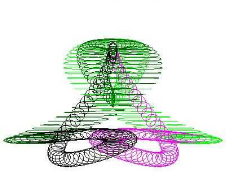


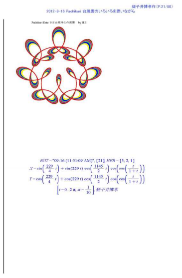
XYZ

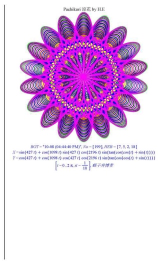


5　２D(前回)　　３D　by H.E

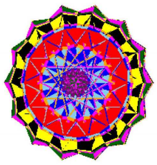








Pachikuri 3D p112 420 ADD 2-Star defined by H.E



"Pachikuri 3D p115 420 ADD 2-Star by H.E", $No(12)$, $HM = [5, 11]$

$X_{12} = 7\cos(10u)\sin(11957v)$

$Y_{12} = \sin(10v)\cos(11957v)$

$Z_{12} = 7\sin(10u)\sin(11957v)$

Pachikuri 3D p112 420 ADD 2-Star defined by H.E

"Pachikuri 3D p115 420 ADD 2-Star by H.E", $No(22)$, $HM = [5, 13]$

$X_{22} = 7\cos(10u)\sin(1027v)$

$Y_{22} = \sin(10v)\cos(1027v)$

$Z_{22} = 7\sin(10u)\sin(1027v)$

Pachikuri 3D p112 420 ADD 2-Star defined by H.E

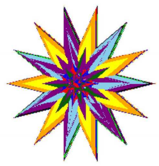
"Pachikuri 3D p115 420 ADD 2-Star by H.E", $No(31)$, $HM = [5, 13]$

$X_{31} = 7\cos(10u)\sin(17771v)$

$Y_{31} = \sin(10v)\cos(17771v)$

$Z_{31} = 7\sin(10u)\sin(17771v)$

Pachikuri 3D p112 420 ADD 2-Star defined by H.E



"Pachikuri 3D p115 420 ADD 2-Star by H.E", $No(63)$, $HM = [8, 13]$

$X_{63} = 7\cos(16u)\sin(14131v)$

$Y_{63} = \sin(16v)\cos(14131v)$

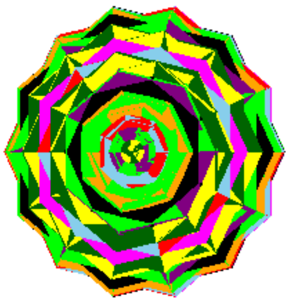
$Z_{63} = 7\sin(16u)\sin(14131v)$

6　PLANE

Our heart is calm like flat plane.
after making 3D EQG
Our heart is happy like infinity plane.
we enjoy big plane like earth surface.
because we catch equations as 2d for 3d.
every things is done, we feel.
and their plane spead to infinity
we can feel plane as peace

我々は、平らな平面のように気持ちが穏やか
ここにその仕事を示します
２４１＋２＝３＾５　この241と２を使っただけでできる３Ｄ

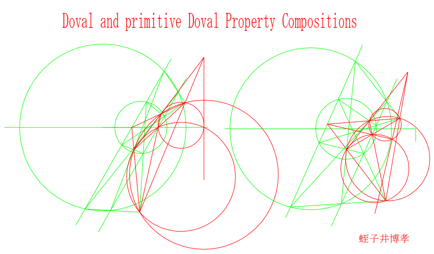
Pachikuri 3D 115 ADD 2-Star defined by H.E

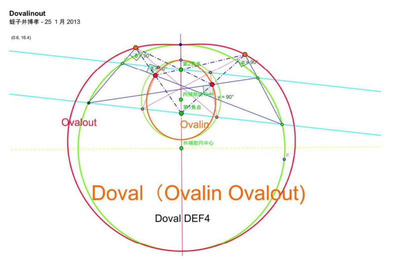


Prof. M.I say "I can not............"

This is happy whisper of 3D

7　DOVAL

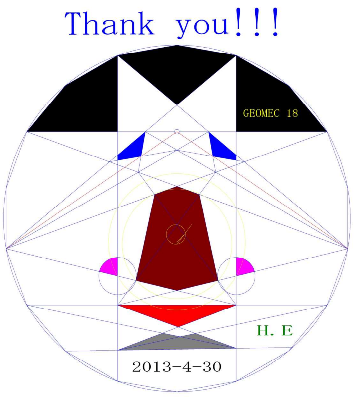


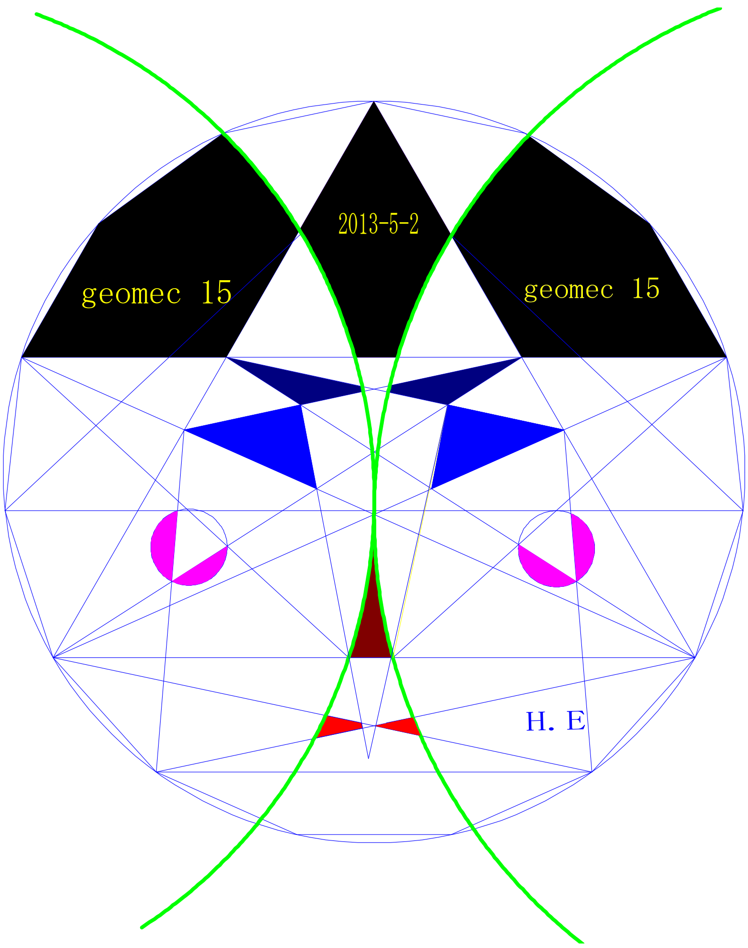


デカルトが居ます。

デカルトの卵形線が Doval の始祖であること
をみつけたのです私が

8　GEOMEC 15





Edit　Summery

変なべき映えです。前回の　”　See you in next 34th. If we can,we make HMD.Thank you!!!

by H.E（5-2）”

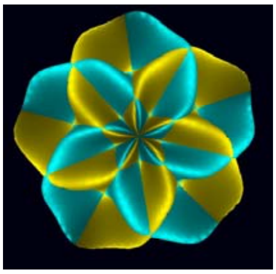
が実現です。　ありがとう数学の女神さん.　　　　　　　　蛭子井博孝記

geoMathe Diary 35th

IDEAL and Passion　　no.8

Hirotaka Ebisui and Maria Intagliata

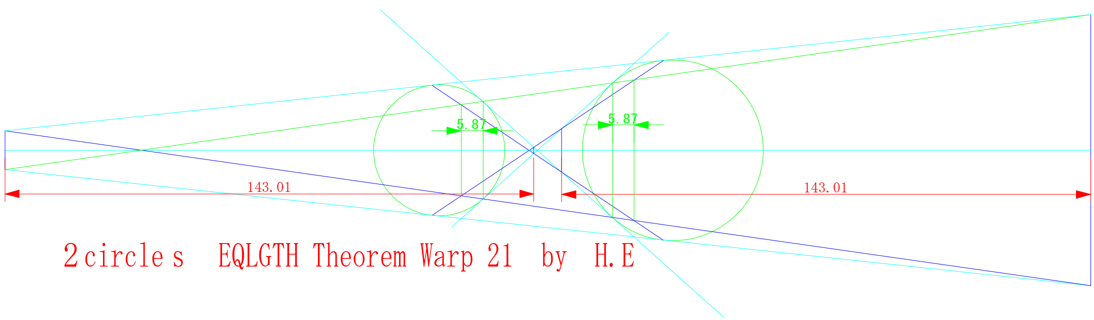
flower



by M.I

contents

今回は、ゆっくり創っている。πに関して、２８ｔｈと、似た関係式で、おもしろい数表になった。
新しい定数：2.38217908799305 が生まれた。
(2.3...)＾π＝πˆ 2.38217908799305=15.2862173478355
Triangle はどんなものになるかお楽しみ。
Doval と primitiveDoval も新しく試みる。
歴史とは、一瞬に生まれ滅びる素粒子に匹敵する、新数の発見により揺れ動くもの。。。。。。
ありがとう数学の女神さん。蛭子井博孝記

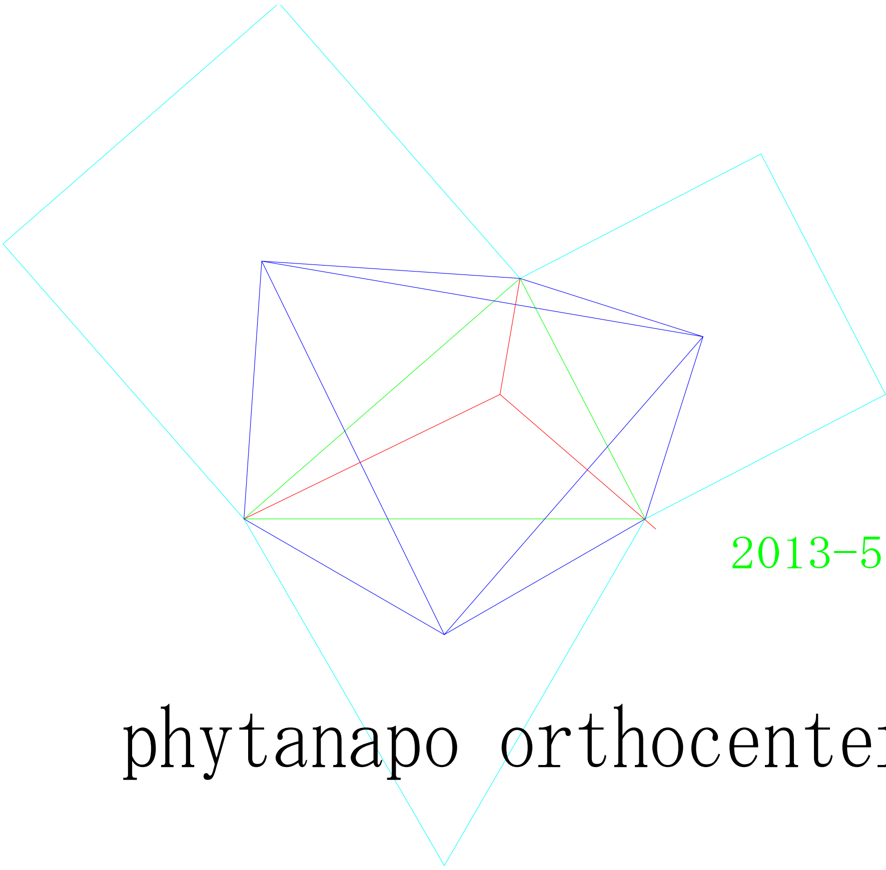


2circles　EQLGTH Theorem Warp 21　by　H.E

卵形線研究センター
http://hoval.blogzine.jp/hirobiro/

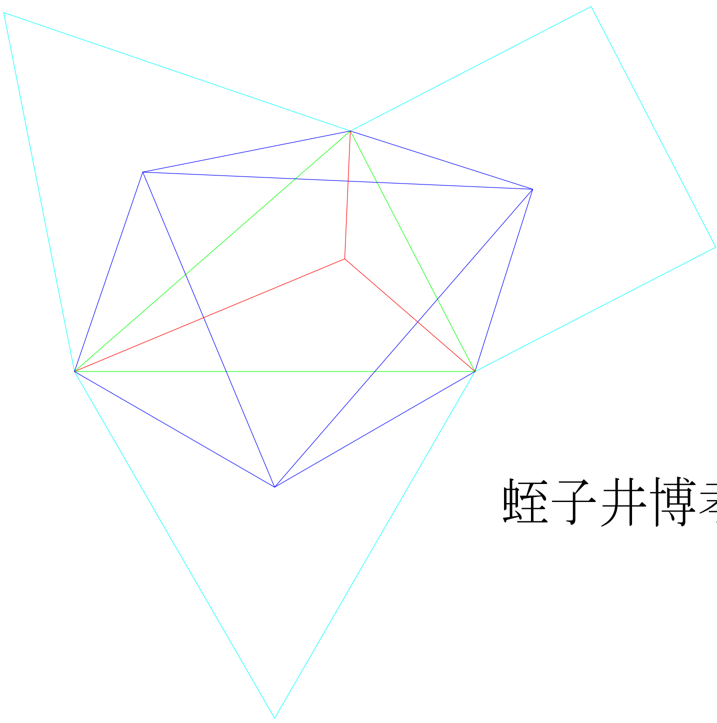
2013-5-10

2. Some Theorem on Triangle in Geometry



2013-5-7

phytanapo orthocenter



蛭子井博孝

3　NUMTable　on　Pi

```
> #Pi  by H.E:
> PS := 0 :for n from 1 to 10 do PS := fsolve(x^Pi + Pi·x − π^n = 0, x) : print(X^Pi + Pi·X − π^n
      = 0, X = PS) :od:
```

$$X^{\pi} + \pi X - \pi = 0, X = 0.8256415397$$
$$X^{\pi} + \pi X - \pi^{2} = 0, X = 1.638885394$$
$$X^{\pi} + \pi X - \pi^{3} = 0, X = 2.695542686$$
$$X^{\pi} + \pi X - \pi^{4} = 0, X = 4.105409305$$
$$X^{\pi} + \pi X - \pi^{5} = 0, X = 6.058451057$$
$$X^{\pi} + \pi X - \pi^{6} = 0, X = 8.819494457$$
$$X^{\pi} + \pi X - \pi^{7} = 0, X = 12.76106169$$
$$X^{\pi} + \pi X - \pi^{8} = 0, X = 18.41350148$$
$$X^{\pi} + \pi X - \pi^{9} = 0, X = 26.53641917$$
$$X^{\pi} + \pi X - \pi^{10} = 0, X = 38.22080506 \quad (1)$$

```
> for m from 1 to 4 do K := solve(h^m − m^h = 0, h) : print(M^H = H^M, H[M = m]
      = {evalf(K)}) : print(H[M = m] = {K}) :
   print("-----------------------------------------------------------------------------------------------
   ------------------------------") :od:
```

$$M^{H} = H^{M}, H_{M=1} = \{1.\}$$
$$H_{M=1} = \{1\}$$

"---
--------------------"

$$M^{H} = H^{M}, H_{M=2} = \{-0.7666646958, 2., 4.\}$$
$$H_{M=2} = \left\{2, 4, -\frac{2\,\mathrm{LambertW}\left(\frac{1}{2}\ln(2)\right)}{\ln(2)}\right\}$$

"---
--------------------"

$$M^{H} = H^{M}, H_{M=3} = \{2.478052685, 3., -0.5529245325 - 0.6010604337\,I, -0.5529245325 + 0.6010604337\,I\}$$
$$H_{M=3} = \left\{3, -\frac{3\,\mathrm{LambertW}\left(-\frac{1}{3}\ln(3)\left(-\frac{1}{2} - \frac{1}{2}I\sqrt{3}\right)\right)}{\ln(3)}, -\frac{3\,\mathrm{LambertW}\left(-\frac{1}{3}\ln(3)\left(-\frac{1}{2} + \frac{1}{2}I\sqrt{3}\right)\right)}{\ln(3)}, -\frac{3\,\mathrm{LambertW}\left(-\frac{1}{3}\ln(3)\right)}{\ln(3)}\right\}$$

"---
--------------------"

$$M^{H} = H^{M}, H_{M=4} = \{-0.7666646958, 1.999999998, 4.000000002, -0.2702792292 - 0.8695448160\,I, -0.2702792292 + 0.8695448160\,I\}$$

$$H_{M=4}=\left\{-\frac{2\,\mathrm{LambertW}\left(-\frac{1}{4}\,\mathrm{I}\,16^{1/4}\ln(2)\right)}{\ln(2)},-\frac{2\,\mathrm{LambertW}\left(\frac{1}{4}\,\mathrm{I}\,16^{1/4}\ln(2)\right)}{\ln(2)},-\frac{2\,\mathrm{LambertW}\left(-\frac{1}{4}\,16^{1/4}\ln(2)\right)}{\ln(2)},-\frac{2\,\mathrm{LambertW}\left(\frac{1}{4}\,16^{1/4}\ln(2)\right)}{\ln(2)},-\frac{2\,\mathrm{LambertW}\left(-1,-\frac{1}{4}\,16^{1/4}\ln(2)\right)}{\ln(2)}\right\}$$

"--" (2)

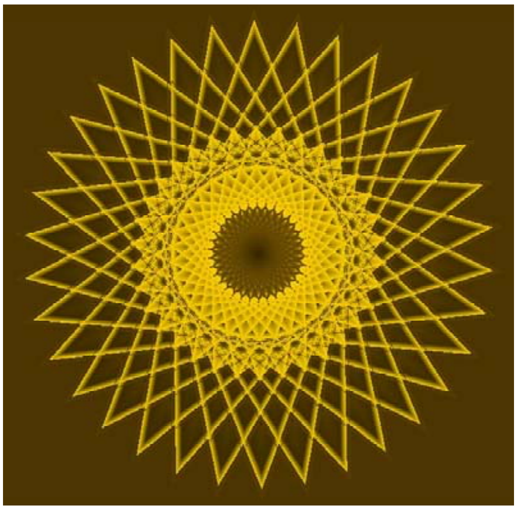
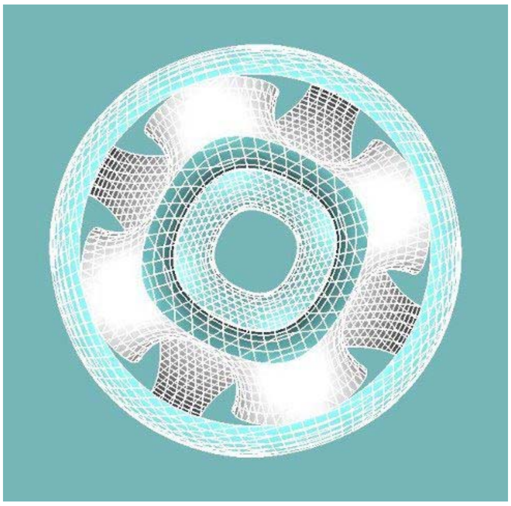
> $\pi^{3.14159265358979}=evalf\left(\pi^{3.14159265358979},15\right);\ \pi^{2.38217908799305}=evalf\left(\pi^{2.38217908799305},15\right);$ $2.38217908799305^{\mathrm{Pi}}=evalf\left(2.38217908799305^{\mathrm{Pi}},15\right);PS:=evalf\left(solve\left(x^{\mathrm{Pi}}-\pi^{x}=0,x\right),15\right):print\left(X^{\mathrm{Pi}}-\pi^{X}=0,X=\{PS\}\right);$ **for** n **from** 2 **to** 8 **do** $PS\|n:=evalf\left(solve\left(x^{\mathrm{Pi}}-n\cdot\pi^{x}=0,x\right),15\right):print\left(n=\frac{[PS\|n]^{\mathrm{Pi}}}{\pi^{PS\|n}}\right)$ **:od:**

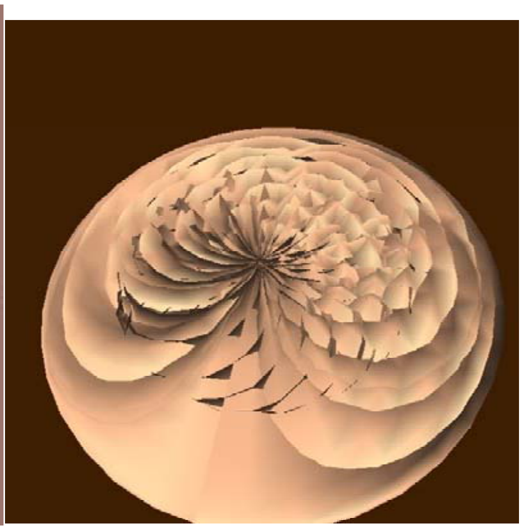
$$\pi^{3.14159265358979}=36.4621596072077$$
$$\pi^{2.38217908799305}=15.2862173478355$$
$$2.38217908799305^{\pi}=15.2862173478356$$
$$X^{\pi}-\pi^{X}=0, X=\{2.38217908799305, 3.14159265358979\}$$
$$2=\frac{[2.35639210836081-1.76228371831438\,\mathrm{I}]^{\pi}}{\pi^{2.35639210836081-1.76228371831438\,\mathrm{I}}}$$
$$3=\frac{[2.11732914954426-2.22103373148791\,\mathrm{I}]^{\pi}}{\pi^{2.11732914954426-2.22103373148791\,\mathrm{I}}}$$
$$4=\frac{[1.94686716217745-2.48942424430572\,\mathrm{I}]^{\pi}}{\pi^{1.94686716217745-2.48942424430572\,\mathrm{I}}}$$
$$5=\frac{[1.81416084061137-2.67575668921190\,\mathrm{I}]^{\pi}}{\pi^{1.81416084061137-2.67575668921190\,\mathrm{I}}}$$
$$6=\frac{[1.70541543331544-2.81680473679211\,\mathrm{I}]^{\pi}}{\pi^{1.70541543331544-2.81680473679211\,\mathrm{I}}}$$
$$7=\frac{[1.61324972526524-2.92938564378483\,\mathrm{I}]^{\pi}}{\pi^{1.61324972526524-2.92938564378483\,\mathrm{I}}}$$
$$8=\frac{[1.53324672803360-3.02253686205513\,\mathrm{I}]^{\pi}}{\pi^{1.53324672803360-3.02253686205513\,\mathrm{I}}}\quad(3)$$

> *# by Hirotaka Ebisui 2013-5-7:*

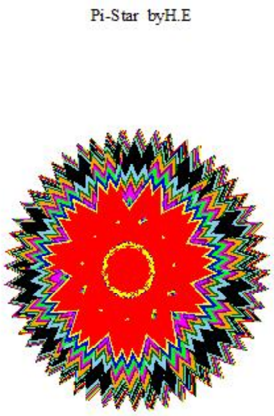
>

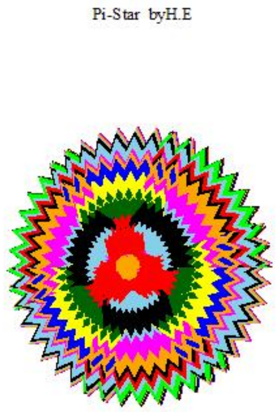
4　3D　by　M.I

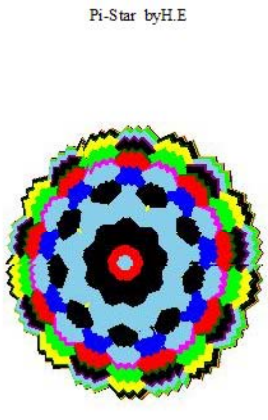



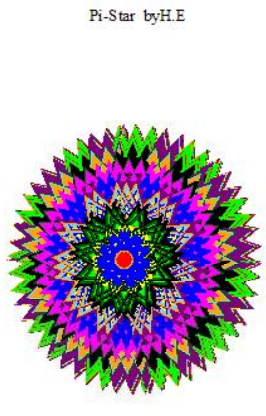


5　3D by H.E



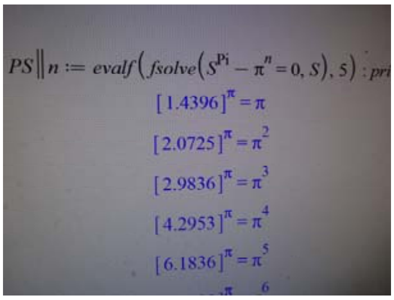






6　HISTORY

歴史とは何か、いや歴史に現れる事柄は何か、時代を超えて残るものは何か。いつもこれらの問いに、答えられるものを創ろうと努力している．つまりものの本質、が何か、たとえば、三角形とは、数とは何か、哲学的問いに、答えられルものでしか、歴史的存在とはならない．今日着て、明日はあらう、日常の衣服や、毎日食べるもの,それは、すぐに消えるであろう。車や,服は、100年も同じものを使わない．しかしピタゴラスの定理は、もう2000年以上も同じものを使っている。このように数学の基本的なものは、歴史を超えて存在する。1+1=2は、これから1000000年以上は使われるだろう。πのしかり。歴史とは、何かを考えて、活きていきたい。



What is history? What apear in History. What exsist beyond history. I alway try to make thee answer for these questions. In another word,What is the principal?For example,what is Triangle?,What is number? Only Answer for Phylosophic question remain in history.

Clothes that today, we wear, and, tomorrow, we wash ,and, Food we eat every day are not used for 100years . Cars are not used for 100years. But, Phytagoras Theorem are used for 2000years as same、Elementaly Theorem in Mathematics exsists beyond History.　１＋１＝２ will be used for 1000000 years future. π is same as １＋１＝２。We want to work on thinking what history is.

(H.E)

Pi　greco　In Italian

Pi greco è dovunque: nella geometria elementare, piana e solida, nella goniometria e trigonometria, in analisi matematica, in statistica, in fisica e in problemi di calcolo delle probabilità, come quello "dell' ago di Buffon". Ma lo si trova anche in composizioni "poetiche" che ne celebrano le cifre e perfino in una marca di profumo e in qualche canzone.

Questo straordinario simbolo, nato come rapporto tra la lunghezza della circonferenza e il suo diametro, rappresenta un numero irrazionale e trascendente, la cui storia millenaria è tra le più affascinanti.

La ricerca delle sue infinite cifre è stata, e continua ad essere, croce e delizia di tanti matematici fin dai tempi dei Babilonesi, che ne attestarono il valore a 25/8, poi degli Egizi che lo fissarono a 3,16, come rilevato dal papiro di Rhind, mentre addirittura nella Bibbia gli viene assegnato come valore 3. Pare che π abbia affascinato molto l' Oriente, lo dimostrano il matematico Bandhayama, l' astronomo Liu-Hcing. A me, in quanto siracusana, piace ricordare il grande contributo di Archimede al calcolo del pi greco, il cui valore egli attestò a 22/7, utilizzando il suo metodo di esaustione, antesignano del futuro concetto di limite.

Sulla scia di Archimede, la passione per la determinazione delle cifre del π raggiunse i massimi livelli grazie al cinese Tsu-Chic e a suo figlio, che diedero dei limiti a π, proprio come aveva fatto Archimede. Ma si sono occupati del π tantissimi altri matematici, tra cui Lord Broucher, con la sua bella "frazione continua", James Gregory e Leibniz, che, con la serie delle arcotangenti, trovarono $\frac{\pi}{4}$. E che dire di Lindemann, il quale dimostrò che l' equazione di Eulero $e^{ix}+1=0$ non ammette come soluzione un numero algebrico e che essa è soddisfatta proprio da π, provandone così la trascendenza.

Dal PIgreco in versi di M.I

A ciascuna cifra corrisponde una parola con lo stesso numero di lettere, per un totale di 999 cifre.

3.　1　4　1　5　9
Sei, o cara e amata geometria,
2　6　5　3　5　8
la poesia amica, del verso sinfonia.
9　7　9
Proprietà antiche, costruite
3　2　3　8
con la dea fantasia,
4　6　2　6
sono eterne, se legate
4　3　3
alla tua via.
....

http://www.matematicamente.it/cultura/matematica_curiosa/pi_greco_in_versi_201004116932/

(M.I)

In English

Pi greek

Pi greek is everywhere: in elementary geometry, plane and solid, in the direction finding and trigonometry, in mathematical analysis, in statistics, in physics and in problems of probability theory, such as "Buffon's needle." But it is also found in "poetic"compositions that celebrate the figures and even a brand of perfume and a few songs.

This unique symbol, born as the ratio between the length of the circumference to its diameter, is an irrational and transcendental number, whose ancient history is among the most fascinating.

The search for his endless digits has been, and continues to be a mixed blessing for many mathematicians since the time of the Babylonians, who attested it to the value of 25/8, then the Egyptians who stared to 3.16, as noted by Rhind papyrus, and even in the Bible it is assigned as a value of 3. It seems that π has fascinated a lot of the 'East, it’s evident from the Bandhayama mathematician, astronomer Liu-Hcing. I. as from Syracuse, would like to mention the great contribution of Archimedes to the calculation of pi greek, the value of which he testified on 22/7, using his method of exhaustion, a forerunner of the future concept of limit.

In the wake of Archimedes, the passion for the determination of the digits of π reached the highest levels thanks to the Chinese Tsu-Chic and his son, who gave limits to π, just as it did Archimedes. But have dealt with the π many other mathematicians, including Lord Broucher, with its beautiful "continued fraction", James Gregory and Leibniz, who, with the series of arctang, found π / 4. And what about Lindemann, who showed that the Euler equation e ^ (ix) +1 = 0 admits no solution to an algebraic number and that it is satisfied exactly by π, so by testing transcendence.

From Pi in verses by M.I

Each digit corresponds to a word with the same number of letters, for a total of 999 digits.

3. 1 4 1 5 9

Are o, dear and beloved geometry,

2 6 5 3 5 8

the poetry friend, of verse symphony.

9 7 9

properties ancient, built

3 2 3 8

with the goddess fantasy,

4 6 2 6

are eternal, if related

4 3 3

to your way.

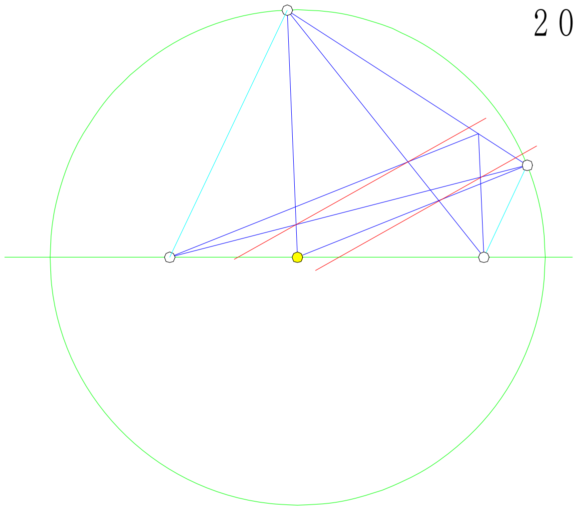
....

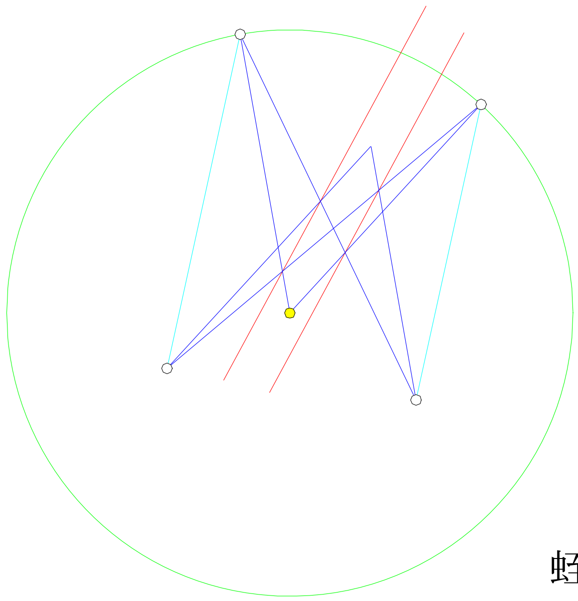
http://www.matematicamente.it/cultura/matematica_curiosa/pi_grec

7　DOVAL

Dovalの4組平行の定理

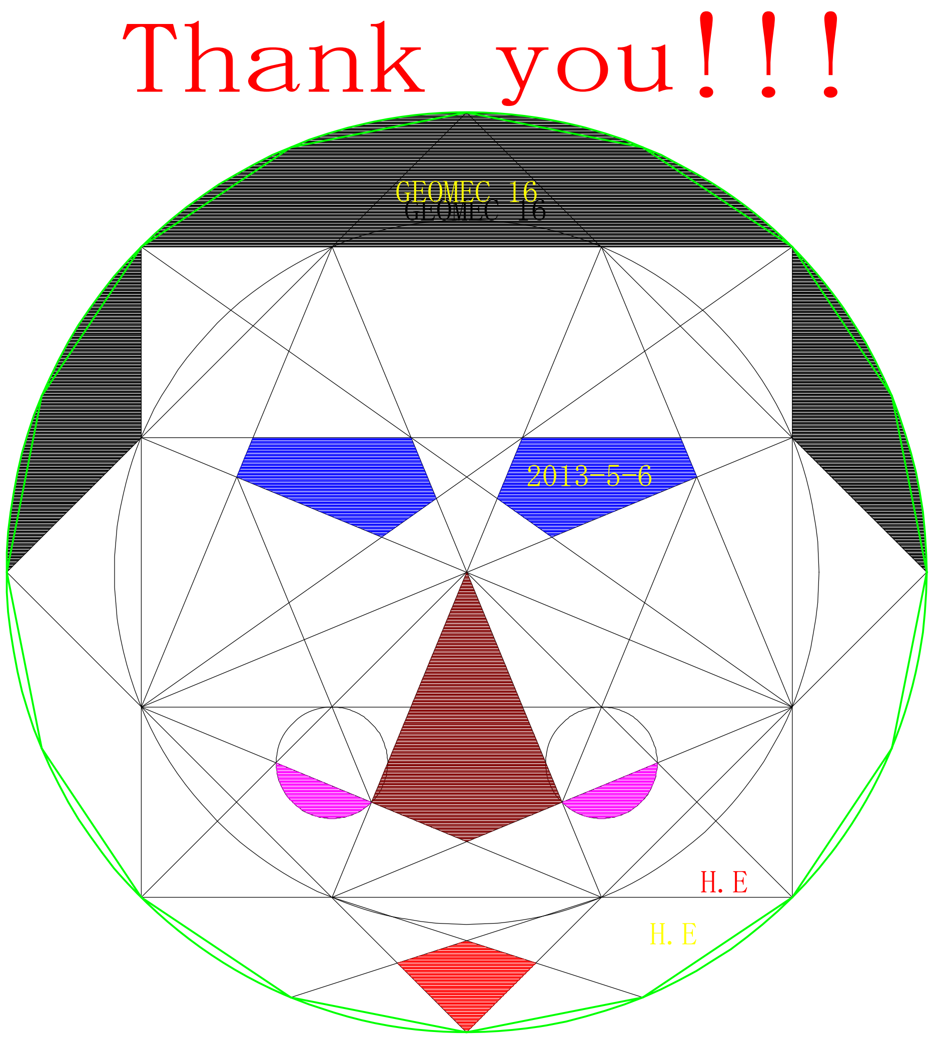
２０１３−５−７





蛭子井博孝

8.　GEOMEC16



編集後記
マリアさんの記事翻訳を載せるのを忘れ指摘され気づいた。
それを載せて、改めて、作り直した。
へまな編集者である。スクロールの大事さを教えてもらった。
ご勘弁を、でも、きれいになった。　(H.E)

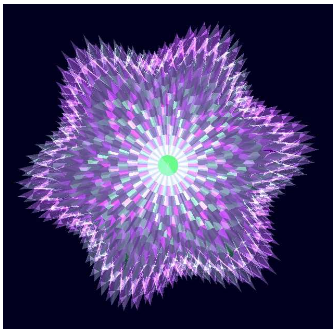
数学日記

geoMathe Diary 36th

IDEAL and Passion No.9

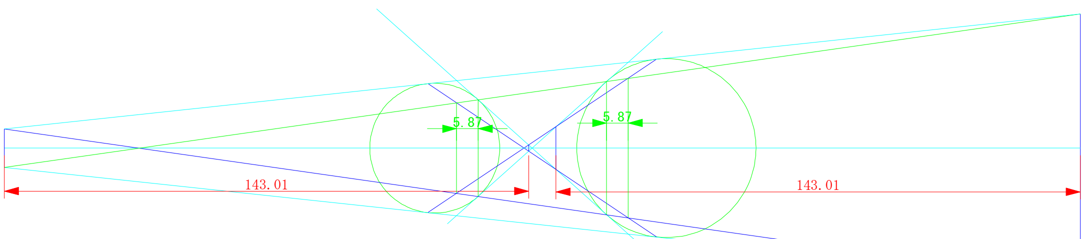
Hirotaka Ebisui and Maria Intagliata

Diary Flower



contents

5-10 NewPc for 36-63th diary を準備した。
6 は、Tittle なしの 2 人のノートを掲載。気ままな文章を載せる。明日、糖尿で入院予定。
血糖値が 530。なかなか、直らない。とにかくリセット入院だ。その間役１０日はこの日記は休む。
しかし退院して出せるように準備するつもりだ。
ヘキサゴン 6 垂線、３平行の定理を見つけ、数学観が変わった。数学とは何か、また、はじめから問い直しである。この 36th が最後かもしれない

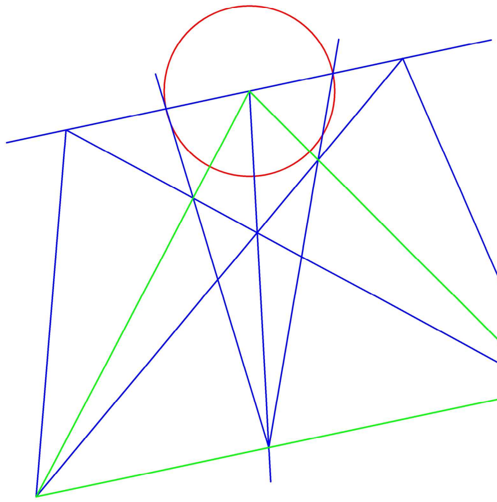


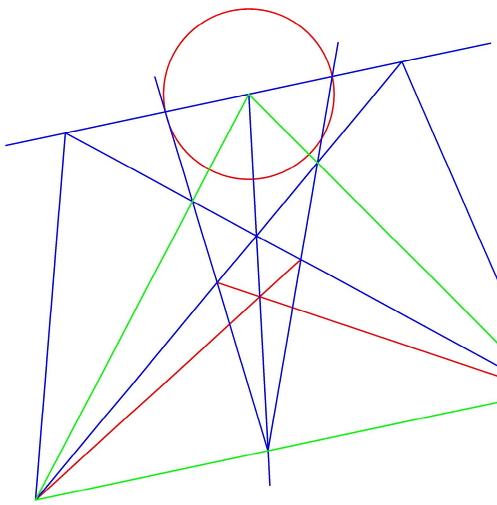
2circle s　EQLGTH Theorem Warp 21　by　H.E

卵形線研究センター
http://hoval.blogzine.jp/

2　　on　Triangle

sundry ones　　２０１３−５−８





by h. e

3　NUMTABLE　π

```
> # pi eq and solutions by H.E
> for h from 1 to 8 do print(seq(π^(e/h) = evalf(π^(e/h), 4), e = 1..8)) :od:
```

$\pi=3.142,\ \pi^{2}=9.872,\ \pi^{3}=31.02,\ \pi^{4}=97.46,\ \pi^{5}=306.2,\ \pi^{6}=962.1,\ \pi^{7}=3023.,\ \pi^{8}=9498.$

$\sqrt{\pi}=1.773,\ \pi=3.142,\ \pi^{3/2}=5.573,\ \pi^{2}=9.872,\ \pi^{5/2}=17.52,\ \pi^{3}=31.02,\ \pi^{7/2}=55.08,\ \pi^{4}=97.46$

$\pi^{1/3}=1.465,\ \pi^{2/3}=2.145,\ \pi=3.142,\ \pi^{4/3}=4.602,\ \pi^{5/3}=6.740,\ \pi^{2}=9.872,\ \pi^{7/3}=14.46,\ \pi^{8/3}=21.18$

$\pi^{1/4}=1.331,\ \sqrt{\pi}=1.773,\ \pi^{3/4}=2.360,\ \pi=3.142,\ \pi^{5/4}=4.183,\ \pi^{3/2}=5.573,\ \pi^{7/4}=7.415,\ \pi^{2}=9.872$

$\pi^{1/5}=1.257,\ \pi^{2/5}=1.581,\ \pi^{3/5}=1.988,\ \pi^{4/5}=2.499,\ \pi=3.142,\ \pi^{6/5}=3.950,\ \pi^{7/5}=4.967,\ \pi^{8/5}=6.245$

$\pi^{1/6}=1.210,\ \pi^{1/3}=1.465,\ \sqrt{\pi}=1.773,\ \pi^{2/3}=2.145,\ \pi^{5/6}=2.596,\ \pi=3.142,\ \pi^{7/6}=3.803,\ \pi^{4/3}=4.602$

$\pi^{1/7}=1.178,\ \pi^{2/7}=1.387,\ \pi^{3/7}=1.633,\ \pi^{4/7}=1.924,\ \pi^{5/7}=2.265,\ \pi^{6/7}=2.668,\ \pi=3.142,\ \pi^{8/7}=3.700$

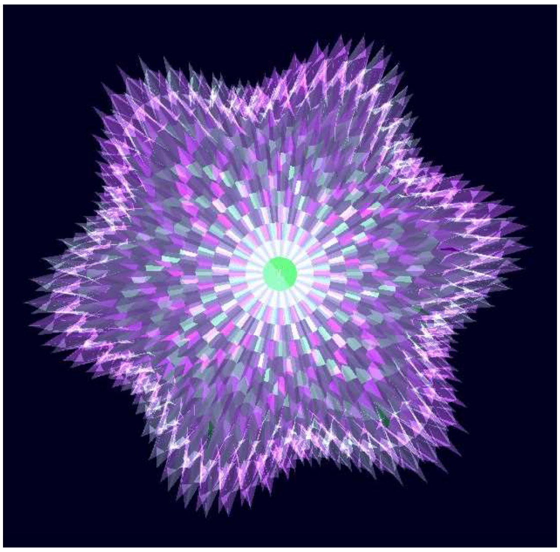
$\pi^{1/8}=1.154,\ \pi^{1/4}=1.331,\ \pi^{3/8}=1.536,\ \sqrt{\pi}=1.773,\ \pi^{5/8}=2.045,\ \pi^{3/4}=2.360,\ \pi^{7/8}=2.723,\ \pi=3.142$ **(1)**

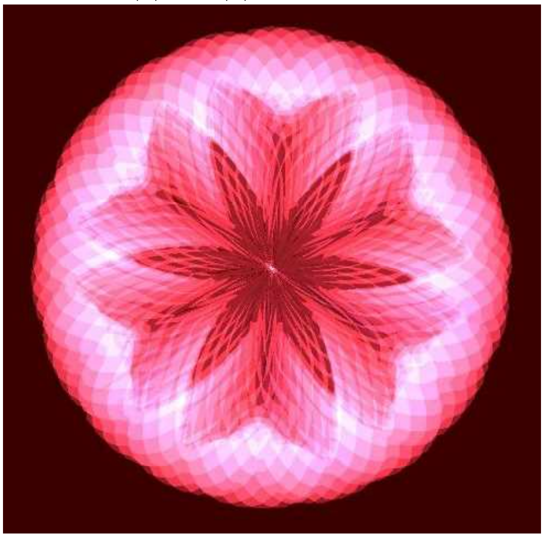
```
>
>
```

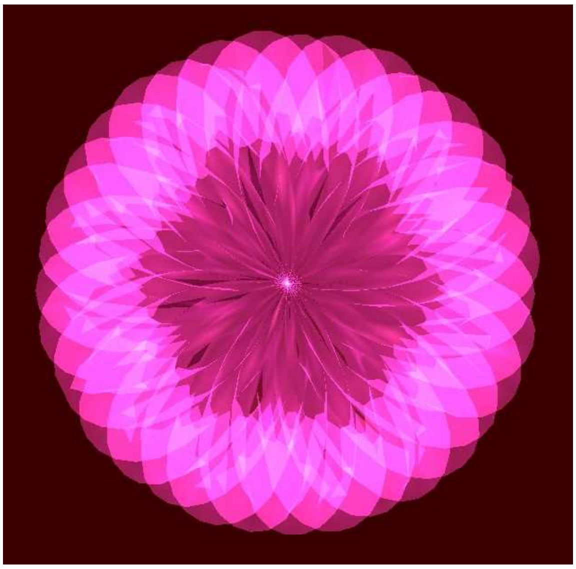
3　　　　3D by M.I

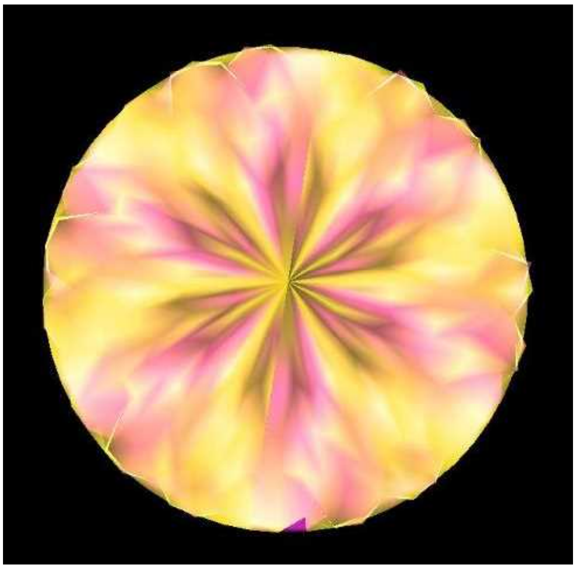
X=cos(34*u+32*v)*cos(30*v+28*u)
*0.5*sin(35*v+33*4)^2
Y=1.01*sin(u)*sin(v)
Z=cos(u)*sin(v)

X=　0.2*pi^cos(34*u+32*v)^4
*cos(30*v+28*u)^4
*pi^cos(sin(31*u+29*v))
Y=　sin(u)　*sin(v)
Z=　cos(u)*sin(v)









5 3d by H.E

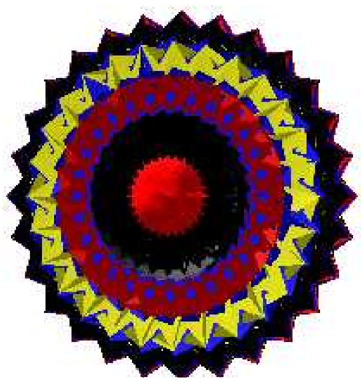
Pris H.M.-Star (meq) byH.E

$X[29] = 4\cos(103049\,u)\ \sin(103067\,v)$

$Y[29] = \sin(103049\,v)\ \cos(103067\,v)$

$Z[29] = 4\sin(103049\,u)\ \sin(103067\,v)$

Pris H.M.-Star (meq) byH.E

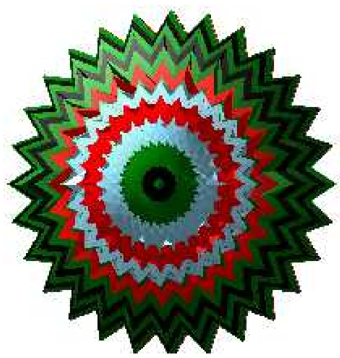


$X[27] = 4\cos(84047\,u)\ \sin(84053\,v)$

$Y[27] = \sin(84047\,v)\ \cos(84053\,v)$

$Z[27] = 4\sin(84047\,u)\ \sin(84053\,v)$

Pris H.M.-Star (meq) byH.E



$X[25] = 4\cos(74489\,u)\ \sin(74507\,v$

$Y[25] = \sin(74489\,v)\ \cos(74507\,v)$

$Z[25] = 4\sin(74489\,u)\ \sin(74507\,v)$

Pris H.M.-Star (meq) byH.E

$X[19] = 4\cos(28793\,u)\ \sin(28807\,v)$

$Y[19] = \sin(28793\,v)\ \cos(28807\,v)$

$Z[19] = 4\sin(28793\,u)\ \sin(28807\,v)$

6　" EQUATION"

式について（H.E）

数式ほど不思議なものはない。その一つに、青春時代から、夢見ていた次ページDovalの標準形がある。今日コンピュータグラフィックが、それをグラフにしてくれる。フラクタル図形やこの日記のマリアさんのグラフや、私の3dも、簡単に描ける。ありがたい。式について、マリアさんの記事を読んで、マクスウェルの方程式の思い出を思い出した。それは私の大学院の試験にMaxwellの方程式について書けという問題が出た。しかし、私は、シュレディンガーの方程式や卵形線の式に夢中になって,勉強しなかったのである。いや覚えなかったのである。その大事さは、Dovalの標準形の比ではない。方程式が、物理量を表して初めて、数学は、存在権を得る。我々の花の式は、その中間。
多くを語らなくても、式の不思議はわかるであろう。式を愛することは、図を愛することに通じる。　（H.E）

in English

Equation is so strange things. oneof them is following Doval standard Fomular which i tried to find in my younger days. and I made it many years later. Resently PC generates easyly some CG of Equations by function graphic soft.Fractal and our 3D can be ganeated ,too. We appriciate
to soft maker. Maxwell in Maria's DOC remind of my waxwell memory.It is the probrem of entrance examine of my graduate school. I had to write about waxwell equation,but I could not write any things about it.I did not to study and memolize about it.when I had to do it,i was carzy about Doval equation and Shulledinger Equations of quantum macanic. Maxwell eq is more important than them. Ithink so now. it's equation expresses physics quantity.and ,then equation exsist in real space. our flower equation is on the way to exsist. not to much talk tells us their strangeness. to love equations it same as to love figure in geometry.

> # DOVAL CG by x-y STANDARD FORMULA transformed from Bipolar coordinates (m·R1±nR2=k·c) by Hirotaka Ebisui

> with(plots) :

> #:

> #---:

> # Doval(The Inner and Outer Oval of Descartes is defined by Followings 4th Order x-y Algeblic Equation.

> $\# \left(m^2-n^2\right)^2 \cdot \left(y^2+\left(x+\frac{n^2 \cdot c}{m^2-n^2}\right)^2-\left(\frac{k^2 \cdot m^2+k^2 \cdot n^2+m^2 \cdot n^2}{\left(m^2-n^2\right)^2}\right) \cdot c^2\right)^2 = -\frac{8 \cdot k^2 \cdot m^2 \cdot n^2 \cdot c^3}{m^2-n^2} \cdot \left(x+\frac{n^2 \cdot c}{m^2-n^2}\right)+\frac{4\, k^2 \cdot m^2 \cdot n^2 \cdot \left(k^2+m^2+n^2\right) \cdot c^4}{\left(m^2-n^2\right)^2}$:

> #k,m,n:Arbitraly constant with a condition($k > m > n > 0$), c : the distance between Fisrt **and** Secand focus points) :

> #---:

> # Example 1:

> $m := 9$:

> $n := 6$:

> $k := 10$:

> $c := 1$:

> #:

> $implicitplot\left(\left(m^2-n^2\right)^2 \cdot \left(y^2+\left(x+\frac{n^2 \cdot c}{m^2-n^2}\right)^2-\left(\frac{k^2 \cdot m^2+k^2 \cdot n^2+m^2 \cdot n^2}{\left(m^2-n^2\right)^2}\right) \cdot c^2\right)^2 = -\frac{8 \cdot k^2 \cdot m^2 \cdot n^2 \cdot c^3}{m^2-n^2} \cdot \left(x+\frac{n^2 \cdot c}{m^2-n^2}\right)+\frac{4\, k^2 \cdot m^2 \cdot n^2 \cdot \left(k^2+m^2+n^2\right) \cdot c^4}{\left(m^2-n^2\right)^2}, x=-20..10, y=-10..10, numpoints=100000\right)$;

In Italian by M.I

Equazione

L' equazione è per me una delle invenzioni più belle e fondamentali del pensiero matematico; lo ha detto anche Einstein: " Tutto ciò che non si condensa in un' equazione non è Scieza" .
Ed infatti questo splendido modello matematico, risolutore di sterminate classi di problemi, viene usato in tutte le scienze e figura molto spesso nei grandi risultati di importanti studiosi del passato: basti pensare alle splendide equazioni di Maxwell, in cui è racchiusa tutta la Fisica e non solo.
Un' equazione può essere di tanti tipi: algebrica, trascendente, funzionale, diofantea e chi più ne ha più ne metta. Sicuramente essa è stata oggetto di studio della maggior parte dei grandi matematici del passato, come Eulero con la sua meravigliosa equazione, soddisfatta dall' irrazionale e trascendente Pi greco.
Ma anche oggi l' equazione riveste un ruolo importante, nella teoria delle equazioni alle derivate parziali, ad esempio, un campo di grande interesse dei matematici dei nostri giorni, tra cui anche il giovane australiano di adozione, Terence Tao, vincitore tra l' altro, della medaglia Fields.
Un' equazione rappresenta soprattutto un vincolo , la cui soluzione è quel "qualcosa "che lo soddisfa, perciò a chi vuol essere libero da vincoli l' equazione potrebbe non piacere.

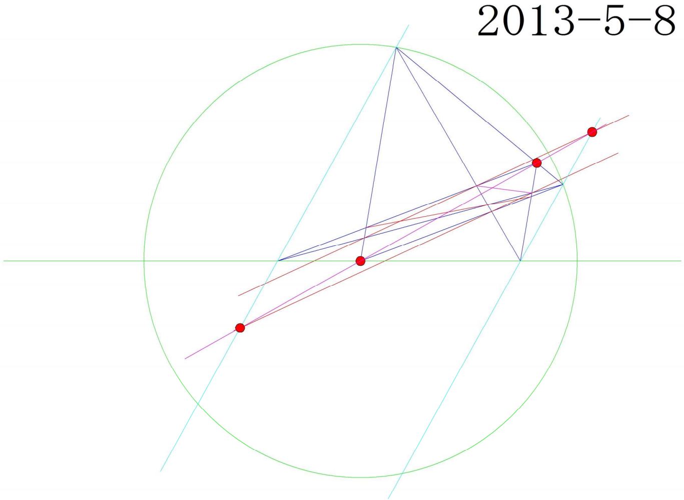
In English

Equation

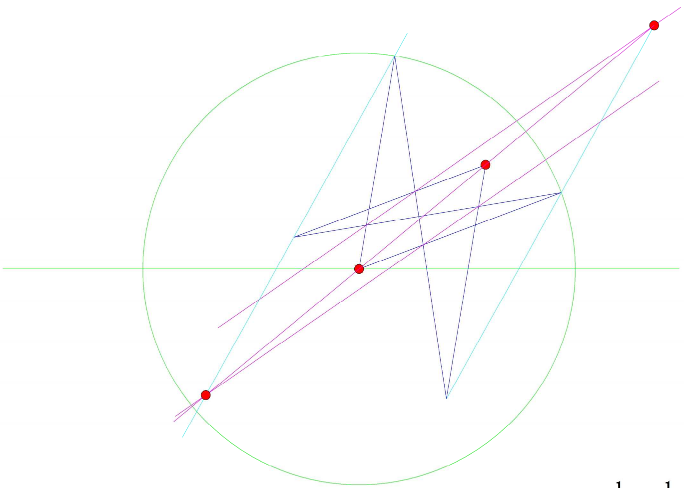
The equation is by me one of the most fundamental and beautiful inventions of mathematical thinking;
Einstein also said: "Everything that does not condense in an equation is not science."
And in fact this beautiful mathematical model, solver exterminated classes of problems, is used in a lot of sciences and is very often in great results of important scholars of the past: just think of the beautiful Maxwell's equations, in which is contained the whole Physics and only it.
An equation can be of many kinds: algebraic, transcendental, functional, Diophantine and so on and so forth. Surely it was the object of study of most of the great mathematicians of the past, as Euler with his wonderful equation satisfied by the irrational and transcendental Pi greek.
But even today the equation plays an important role in the theory of partial differential equations, for example, a field of great mathematicians of our time, including the young Australian by adoption, Terence Tao, among other winner , the Fields Medal.

7 Doval and Primitive Doval

2013-5-8

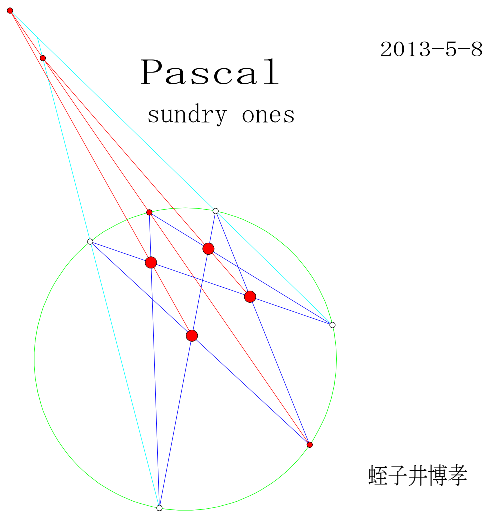


Doval and primitive Doval　sundry ones theorems



by h.e

8　　　　　GEOMEC 12



編集後記

はじめのメモで感じたとおり、マリアさんとは最後になりそう。明日入院に文章が間に合わない。お互いの調子を合わせるのは、難しい。残念ながら、9 番で、当分終わり。

でもよく続いたものだ。ありがとう、マリアさん。今、マリアさんから EQUATION が届いた。それを読んで、私を真摯にした.ああ,MAXWELL の電磁方程式。忘れていた。青春のすべてが、まちがっていた。そして、奇妙な Doval の標準形。私は、奇妙な人生を送っている。マリアさんの献身的な、人生に比べ、最後のジオメックとパスカルの新定理雑題が物語る人生。　　　　　　　　　　えびすいひろたか　2013-5-10 深夜

数学日記

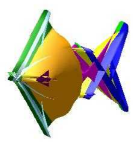
geoMathe Diary 37th

IDEAL and Passion No. 1 0

Hirotaka Ebisui and Maria Intagliata

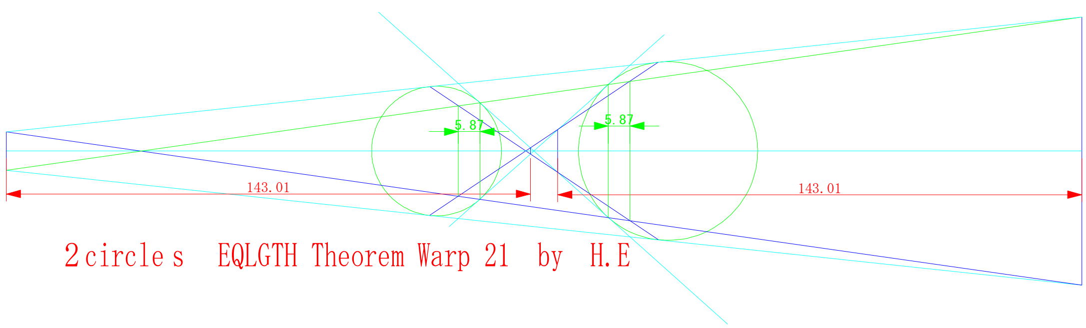
Fish

$\sin(5\sin(u)^6\cos(v)+6)+2\sin(u)\cos(v)^6+3$



contents

5-23　午前 2 時過ぎ、飲み物を買い、飲みながら編集、まだ 6 の原稿がない。5 まですむ。3 を pdf を利用したいが、画像にした。平行線の記事書くのが大変。DOVAL もまだ。寂しさや、どうでもいいや、五月冷え。何かしっくりこない。この日記作りも面倒が伴う　メイプルで数表作りや、3d 作りだけが楽、マリヤさんの 3D や DOC と一緒にするのが面倒。しかし、まとめて編集しておかないと、ばらばらになる。7:40　am　37th end ありがとう。(h.e)



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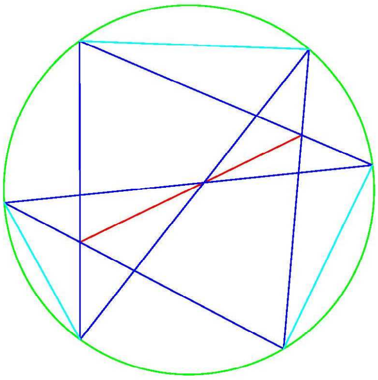
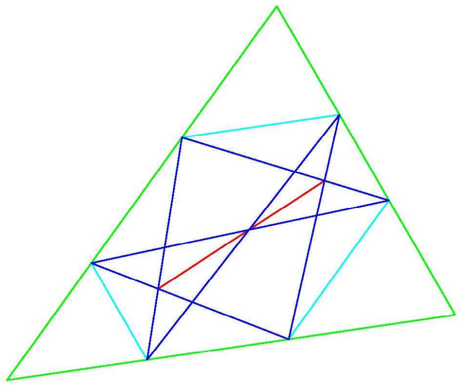
http://hoval.blogzine.jp/

2 on Paralell Theorem　in Geometry

Circle Pascal Theorem



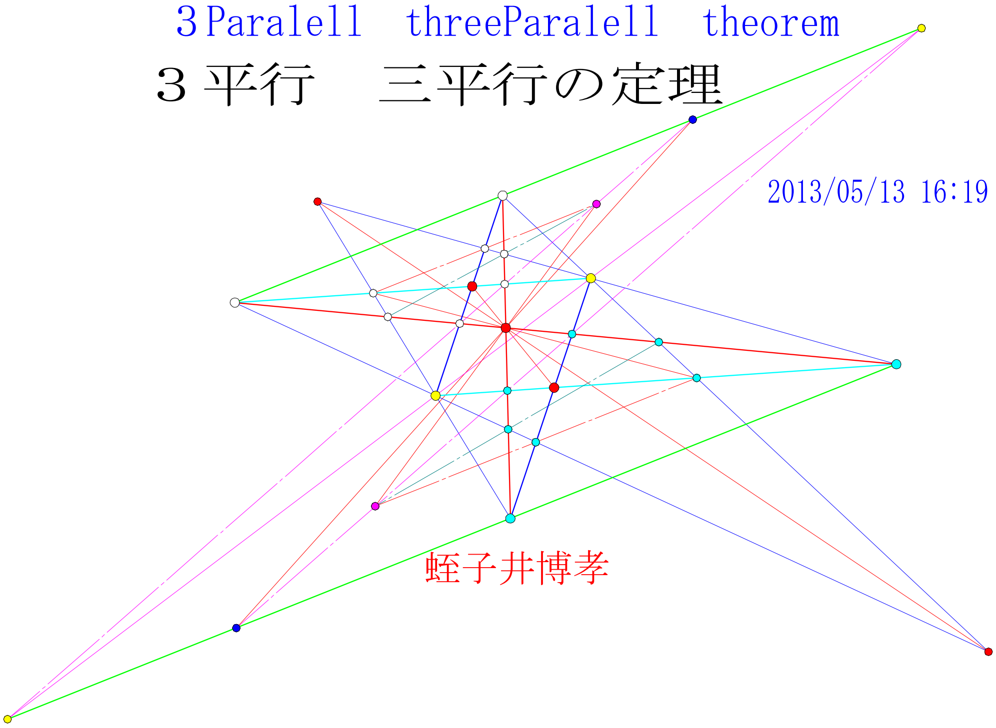
Triangle Paralell　Pascal Theorem



蛭子井博孝

3 Paralell　threeParalell　theorem

３平行　三平行の定理



3 NUMBER Table Prime

> # *HI-NUMTable* $m^h + e^e + h^m = MHE\,prime$, MHE^i **by** *HE* 2013 − 5 − 22 :

> $c := 0$:**for** h **from** 2 **to** 8 **do for** m **from** 2 **to** 13 **do for** e **from** 2 **to** 5 **do** $MHE := m^h + e^e + h^m$: **if** $isprime(MHE)$ **then** $c := c + 1$: $print\left(mhe(c)[[2, 13], [2, 8], [2, 5]], [m]^h + [e]^e + [h]^m = MHE\,prime \right)$ **fi**:**for** i **from** 2 **to** 9 **do if** $\text{floor}\left(evalf\left(MHE^{\frac{1}{i}}\right)\right)^i = MHE$ **then** $c := c + 1$: $print\left(mhe(c)[[2, 13], [2, 8], [2, 5]], [m]^h + [e]^e + [h]^m = \left[simplify\left(MHE^{\frac{1}{i}} \right)\right]^i \right)$ **fi**:**od**:**od**:**od**:**od**:

$$mhe(1)_{[2, 13], [2, 8], [2, 5]}, [4]^2 + [2]^2 + [2]^4 = [6]^2$$
$$mhe(2)_{[2, 13], [2, 8], [2, 5]}, [4]^2 + [3]^3 + [2]^4 = 59\ prime$$
$$mhe(3)_{[2, 13], [2, 8], [2, 5]}, [5]^2 + [2]^2 + [2]^5 = 61\ prime$$
$$mhe(4)_{[2, 13], [2, 8], [2, 5]}, [5]^2 + [4]^4 + [2]^5 = 313\ prime$$
$$mhe(5)_{[2, 13], [2, 8], [2, 5]}, [6]^2 + [3]^3 + [2]^6 = 127\ prime$$
$$mhe(6)_{[2, 13], [2, 8], [2, 5]}, [7]^2 + [2]^2 + [2]^7 = 181\ prime$$
$$mhe(7)_{[2, 13], [2, 8], [2, 5]}, [7]^2 + [4]^4 + [2]^7 = 433\ prime$$
$$mhe(8)_{[2, 13], [2, 8], [2, 5]}, [8]^2 + [2]^2 + [2]^8 = [18]^2$$
$$mhe(9)_{[2, 13], [2, 8], [2, 5]}, [8]^2 + [3]^3 + [2]^8 = 347\ prime$$
$$mhe(10)_{[2, 13], [2, 8], [2, 5]}, [8]^2 + [4]^4 + [2]^8 = [24]^2$$
$$mhe(11)_{[2, 13], [2, 8], [2, 5]}, [10]^2 + [3]^3 + [2]^{10} = 1151\ prime$$
$$mhe(12)_{[2, 13], [2, 8], [2, 5]}, 3\,[3]^3 = [9]^2$$
$$mhe(13)_{[2, 13], [2, 8], [2, 5]}, 3\,[3]^3 = [3]^4$$
$$mhe(14)_{[2, 13], [2, 8], [2, 5]}, [4]^3 + [2]^2 + [3]^4 = 149\ prime$$
$$mhe(15)_{[2, 13], [2, 8], [2, 5]}, [4]^3 + [4]^4 + [3]^4 = 401\ prime$$
$$mhe(16)_{[2, 13], [2, 8], [2, 5]}, [6]^3 + [4]^4 + [3]^6 = 1201\ prime$$
$$mhe(17)_{[2, 13], [2, 8], [2, 5]}, [7]^3 + [3]^3 + [3]^7 = 2557\ prime$$
$$mhe(18)_{[2, 13], [2, 8], [2, 5]}, [9]^3 + [5]^5 + [3]^9 = 23537\ prime$$
$$mhe(19)_{[2, 13], [2, 8], [2, 5]}, [11]^3 + [5]^5 + [3]^{11} = 181603\ prime$$
$$mhe(20)_{[2, 13], [2, 8], [2, 5]}, [4]^2 + [2]^2 + [2]^4 = [6]^2$$
$$mhe(21)_{[2, 13], [2, 8], [2, 5]}, [4]^2 + [3]^3 + [2]^4 = 59\ prime$$
$$mhe(22)_{[2, 13], [2, 8], [2, 5]}, [4]^3 + [2]^2 + [3]^4 = 149\ prime$$
$$mhe(23)_{[2, 13], [2, 8], [2, 5]}, [4]^3 + [4]^4 + [3]^4 = 401\ prime$$
$$mhe(24)_{[2, 13], [2, 8], [2, 5]}, 2\,[4]^4 + [5]^5 = 3637\ prime$$
$$mhe(25)_{[2, 13], [2, 8], [2, 5]}, [6]^4 + [3]^3 + [4]^6 = 5419\ prime$$

$$mhe(26)_{[2,\,13],\,[2,\,8],\,[2,\,5]},\ [5]^2 + [2]^2 + [2]^5 = 61\ prime$$
$$mhe(27)_{[2,\,13],\,[2,\,8],\,[2,\,5]},\ [5]^2 + [4]^4 + [2]^5 = 313\ prime$$
$$mhe(28)_{[2,\,13],\,[2,\,8],\,[2,\,5]},\ 2\ [5]^5 + [3]^3 = 6277\ prime$$
$$mhe(29)_{[2,\,13],\,[2,\,8],\,[2,\,5]},\ [7]^5 + [5]^5 + [5]^7 = 98057\ prime$$
$$mhe(30)_{[2,\,13],\,[2,\,8],\,[2,\,5]},\ [8]^5 + [4]^4 + [5]^8 = 423649\ prime$$
$$mhe(31)_{[2,\,13],\,[2,\,8],\,[2,\,5]},\ [10]^5 + [4]^4 + [5]^{10} = [3141]^2$$
$$mhe(32)_{[2,\,13],\,[2,\,8],\,[2,\,5]},\ [6]^2 + [3]^3 + [2]^6 = 127\ prime$$
$$mhe(33)_{[2,\,13],\,[2,\,8],\,[2,\,5]},\ [6]^3 + [4]^4 + [3]^6 = 1201\ prime$$
$$mhe(34)_{[2,\,13],\,[2,\,8],\,[2,\,5]},\ [6]^4 + [3]^3 + [4]^6 = 5419\ prime$$
$$mhe(35)_{[2,\,13],\,[2,\,8],\,[2,\,5]},\ [7]^6 + [2]^2 + [6]^7 = 397589\ prime$$
$$mhe(36)_{[2,\,13],\,[2,\,8],\,[2,\,5]},\ [11]^6 + [4]^4 + [6]^{11} = 364568873\ prime$$
$$mhe(37)_{[2,\,13],\,[2,\,8],\,[2,\,5]},\ [7]^2 + [2]^2 + [2]^7 = 181\ prime$$
$$mhe(38)_{[2,\,13],\,[2,\,8],\,[2,\,5]},\ [7]^2 + [4]^4 + [2]^7 = 433\ prime$$
$$mhe(39)_{[2,\,13],\,[2,\,8],\,[2,\,5]},\ [7]^3 + [3]^3 + [3]^7 = 2557\ prime$$
$$mhe(40)_{[2,\,13],\,[2,\,8],\,[2,\,5]},\ [7]^5 + [5]^5 + [5]^7 = 98057\ prime$$
$$mhe(41)_{[2,\,13],\,[2,\,8],\,[2,\,5]},\ [7]^6 + [2]^2 + [6]^7 = 397589\ prime$$
$$mhe(42)_{[2,\,13],\,[2,\,8],\,[2,\,5]},\ [8]^7 + [2]^2 + [7]^8 = 7861957\ prime$$
$$mhe(43)_{[2,\,13],\,[2,\,8],\,[2,\,5]},\ [8]^7 + [4]^4 + [7]^8 = 7862209\ prime$$
$$mhe(44)_{[2,\,13],\,[2,\,8],\,[2,\,5]},\ [8]^2 + [2]^2 + [2]^8 = [18]^2$$
$$mhe(45)_{[2,\,13],\,[2,\,8],\,[2,\,5]},\ [8]^2 + [3]^3 + [2]^8 = 347\ prime$$
$$mhe(46)_{[2,\,13],\,[2,\,8],\,[2,\,5]},\ [8]^2 + [4]^4 + [2]^8 = [24]^2$$
$$mhe(47)_{[2,\,13],\,[2,\,8],\,[2,\,5]},\ [8]^5 + [4]^4 + [5]^8 = 423649\ prime$$
$$mhe(48)_{[2,\,13],\,[2,\,8],\,[2,\,5]},\ [8]^7 + [2]^2 + [7]^8 = 7861957\ prime$$
$$mhe(49)_{[2,\,13],\,[2,\,8],\,[2,\,5]},\ [8]^7 + [4]^4 + [7]^8 = 7862209\ prime$$
$$mhe(50)_{[2,\,13],\,[2,\,8],\,[2,\,5]},\ [10]^8 + [3]^3 + [8]^{10} = 1173741851\ prime$$
$$mhe(51)_{[2,\,13],\,[2,\,8],\,[2,\,5]},\ [13]^8 + [2]^2 + [8]^{13} = 550571544613\ prime \tag{1}$$

>

>

> # HI-NUMTable $m^h+h^m=prime$, X^E **by** HE

> $c:=0$:**for** h **from** 2 **to** 420 **do for** m **from** 2 **to** 717 **do** $MH:=m^h+h^m$: **if** $isprime(MH)$ **then** $c:=c+1$: $print(\ mh(c)[2, 717, 2, 420],\ [m]^h+[h]^m=MH\ prime)$ **fi**:**od**:**od**:

$mh(1)_{2,\ 717,\ 2,\ 420},\ [3]^{2}+[2]^{3}=17$ *prime*

$mh(2)_{2,\ 717,\ 2,\ 420},\ [9]^{2}+[2]^{9}=593$ *prime*

$mh(3)_{2,\ 717,\ 2,\ 420},\ [15]^{2}+[2]^{15}=32993$ *prime*

$mh(4)_{2,\ 717,\ 2,\ 420},\ [21]^{2}+[2]^{21}=2097593$ *prime*

$mh(5)_{2,\ 717,\ 2,\ 420},\ [2]^{33}+[33]^{2}=8589935681$ *prime*

$mh(6)_{2,\ 717,\ 2,\ 420},\ [3]^{2}+[2]^{3}=17$ *prime*

$mh(7)_{2,\ 717,\ 2,\ 420},\ [56]^{3}+[3]^{56}=523347633027360537213687137$ *prime*

$mh(8)_{2,\ 717,\ 2,\ 420},\ [24]^{5}+[5]^{24}=59604644783353249$ *prime*

$mh(9)_{2,\ 717,\ 2,\ 420},\ [54]^{7}+[7]^{54}$
=4318114567396436564035293097707729426477458833 *prime*

$mh(10)_{2,\ 717,\ 2,\ 420},\ [69]^{8}+[8]^{69}$
=205688069665150755269371147819668813122841983204711281293004769 *prime*

$mh(11)_{2,\ 717,\ 2,\ 420},\ [519]^{8}+[8]^{519}$
=5054791526742297335205968700565490998521822179115797475721845227525781\
266929153326588957299647676898274380090710349684101687524349191380444 11\
266738167811138418486035651108541033784951762692215924102959844816591 41\
609430389060596345831605166925885227327811099067872288550692005305975 55\
455322865095455337007361896002430534227998656006877151286200910338764 38\
206927207711737820776164358755766790885178085102279851968935239849470 24\
520860597379454694560858405525725100409054913 *prime*

$mh(12)_{2,\ 717,\ 2,\ 420},\ [9]^{2}+[2]^{9}=593$ *prime*

$mh(13)_{2,\ 717,\ 2,\ 420},\ [76]^{9}+[9]^{76}$
=332989636531614275632230704206526979767825790350750676442125029156231\
2417 *prime*

$mh(14)_{2,\ 717,\ 2,\ 420},\ [122]^{9}+[9]^{122}$
=261568927457882874608733211757582315090892217214195250256575658313972\
90128117031983042664972049505533777596520807 7073 *prime*

$mh(15)_{2,\ 717,\ 2,\ 420},\ [422]^{9}+[9]^{422}$
=490161259638758699097587516570388804223553320893605638530153376222613\
475800135309304516408589390223112429834096109000117510679346117889270 50\
150022027687069086836259266080903202869215439413859407777272140105944 33\
631198865923474653951176664268125156794218605792723174531422818053026 52\
915300005103482326607251479116707157666201616368897712718187224507010 86\
58180872970417613397422754265288431831550523116273 *prime*

$mh(16)_{2,\ 717,\ 2,\ 420},\ [2]^{15}+[15]^{2}=32993$ *prime*

6428003470497445656007257730207971096742289403483387007905634104231395 4\
9503033066097753667588756542336490264540127911771824840689098003757406 3\
5567792618409877923903328804607686747508551182788215187315706825259409 7\
87659457 *prime*

$mh(82)_{2,\ 717,\ 2,\ 420},\ [590]^{291}+[291]^{590}$

=4975806713001243883918156757958772058691060672188096126643063647204 01\
0928543307488481176115132280286060150659876794540641438868038588211661 3\
3684232833623919386409553880457069251350102653848528536167991556737378 0\
3620794113285926672712077174664929088486675875014863634800607722043006 0\
1702606539532032164253486666170979330479488293700583941612074576218904 8\
8008748105276708906337355074078850731816421748284341648758687000102430 3\
5186896820170433209395527982517312543858145477035842049350955064576347 8\
4983079920631011336313000455074103469571110065830460569265812738353211 8\
7166438457363708059119802649907375164124113459151990754805913952741228 6\
9137789286601373030430675732664509238344617162985569080811513664161338 5\
9098945787600498676107169008493453398267402719875068879708565711901362 4\
1524147811571562789423327898942485494256364750681360785765719607652299 0\
8937018737629965774180975733352581525625600154787592599293512684199203 0\
6496849280695462247164316478919642995733743503390385612754613436877417 2\
6199095646535143501592459052160093461428525809450595754823008011101534 7\
0099460548623392381359538153489381239526487545597917487578608241095013 1\
6827719467881558406231340202300992935366310626647211084236062926873282 4\
3602126141799385318129025015464465384459939411190859847972323871032939 2\
8330830953401078255516810459166491336852976189213470482632267071823745 7\
0976397736772361347253762951321094939846583449934405064806971545223176 6\
964176989359291198740706516555036601 *prime*

$mh(83)_{2,\ 717,\ 2,\ 420},\ [91]^{318}+[318]^{91}$

=9444147429910781803287936474761102771569772248943521266247169973622 05\
9073735398646189477940703772291808067189572631552750927374579780250559 2\
6749286268939719836023138709147601085856433030710061304437666469247840 0\
8705270025739694930132898508601525426395691692743384332319592453916895 0\
0839200426504001416515398602463340706955614855935409673381069983757653 0\
6729427342697191600750302726990702125238458017301349989518740051655334 6\
2220926012093669576960485057809734065157128940738919753783011293381774 4\
5639713389042306767815719015310091102850445736231554807283326447228338 4\
935701597356486131240610277350970800295434406012792005353 *prime*

$mh(84)_{2,\ 717,\ 2,\ 420},\ [247]^{318}+[318]^{247}$

=7544511703418169076213420422681920693239484055179857038406111509107 97\
8210200809459988077174337472409119699015511404871107427523987043079455 0\
7063995209816914126101230212447969471739109843485225147198209541391386 0\
0356293810493151306111485157548261809135200140975125156459212801958983 3\
6431627755193661814805381017268122502917436567224644003945188677843751 9\
1078611954864360558244903654372174980866351601477789611660263141200206 6\
2598809015446251584702879745971530501508093199532558805393573619900787 6\

4 3D by M.I.

BIANCO

X=cos (u) *cos (v)

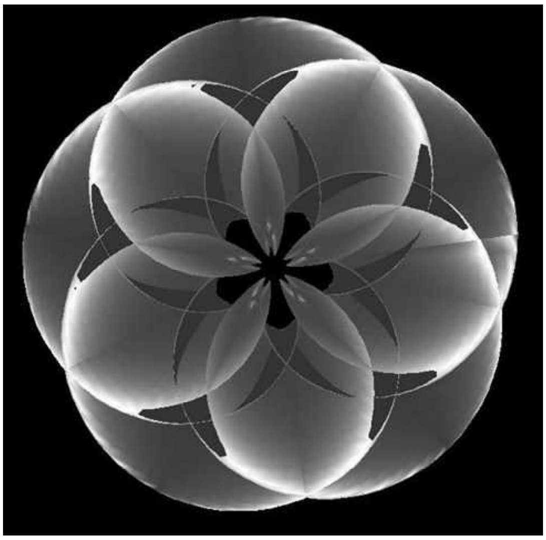
Y=1.29*4^sin (7*u-5*v) *0.8*cos (u)

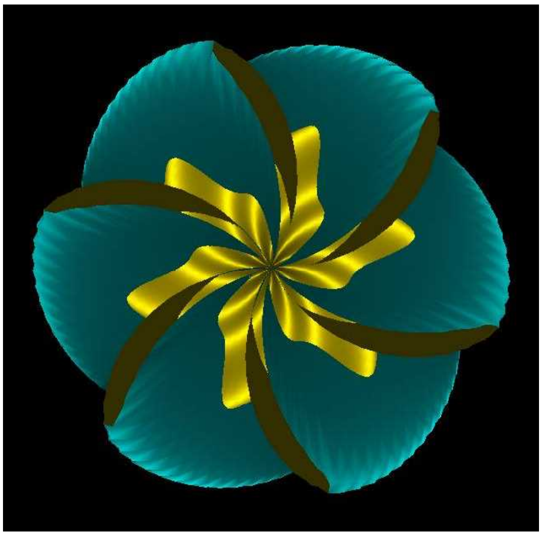
Z=cos (u) *sin (v)

x=cos (u) *cos (v)

y=pi^sin (u) *0.56*cos (6*u-6*v)

z=cos (u) *sin (v)





x=1.23*cos (5*u) *cos (v) * (abs (cos (5*u)) ^0.5

+ abs (sin (1.25*u)) ^0.5) ^ (-3.34) * (abs (cos (1.25*v)) ^1.6

+ abs (sin (1.25*v)) ^1.6) ^ (-10)

y=sin (u) * (abs (cos (1*u/4)) ^0.5

+ abs (sin (0.25*u)) ^0.9) ^ (-3.34) *sin (v)

z=cos (u) *sin (v) * (abs (cos (0.25*u)) ^0.5

+ abs (sin (0.25*u)) ^0.5) ^ (-1/0.3) * (abs (cos (1.25*v)) ^1.67

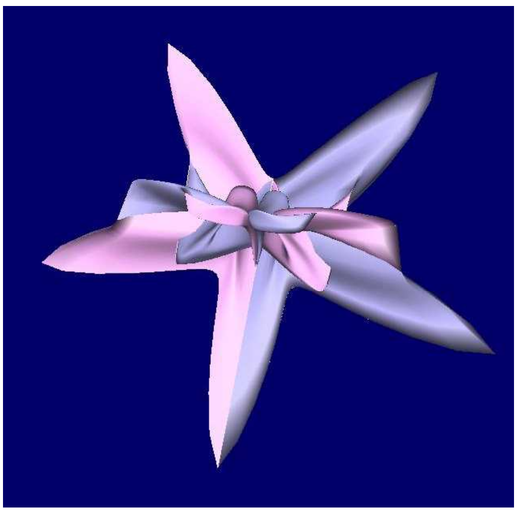
+ abs (sin (1.25*v)) ^1.6) ^ (-10)

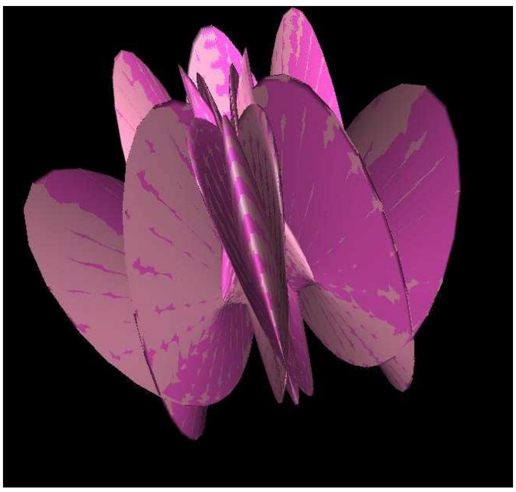
Abbraccio di farfalle...

x=cos (5*u) *0.67*cos (2*v)

y=0.52*sin (3*u) *sin (v) *cos (2*v)

z=0.8*cos (7*u) *sin (3*v)



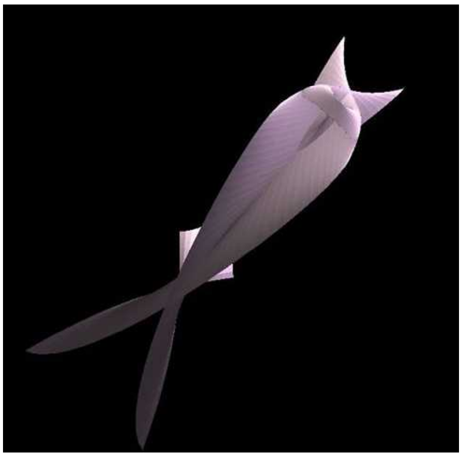


Fish

X=0.34*(2.8*u -u^3/7 +0.9* u*v^2)*cos(u)*cos(v)

Y=0.6*(1.9*u^2 -1.1*v^2)*sin(u)^2

Z=(v -2.3*v^3/5 + 0.9*v*u^2)*cos(2*u)*sin(v/2)

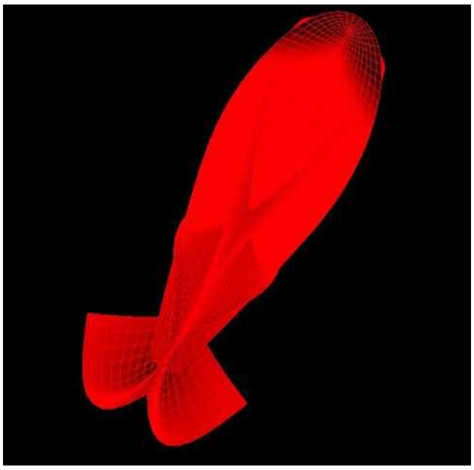


Red fish

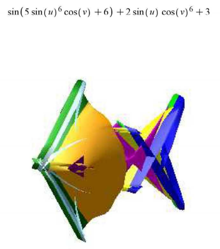
X=0.34*(2.8*u -u^3/7 +1.9* u*v^2)*2*cos(u)*cos(v)

Y=0.5*(2.9*u^2 +2*v^2)*sin(u)^2

Z=(v -2.3*v^3/5 +1.1*v*u^2)*cos(2*u)^3*sin(v/2)

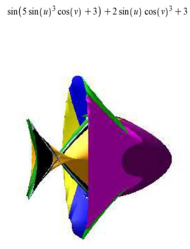


5 SPFG 3D by H.E



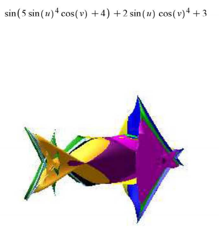
"SFG fish by H.E", $No(5)$, $H = [6]$, $OT = [156, 78]$

$SPF = \sin\left(5 \sin(u)^6 \cos(v) + 6\right) + 2 \sin(u) \cos(v)^6 + 3$ **(5)**



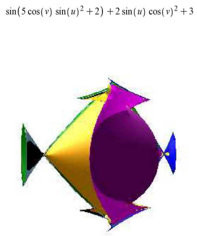
"SFG fish by H.E", $No(2)$, $H = [3]$, $OT = [168, 84]$

$SPF = \sin\left(5 \sin(u)^3 \cos(v) + 3\right) + 2 \sin(u) \cos(v)^3 + 3$



"SFG fish by H.E", $No(3)$, $H = [4]$, $OT = [164, 82]$

$SPF = \sin\left(5 \sin(u)^4 \cos(v) + 4\right) + 2 \sin(u) \cos(v)^4 + 3$



"SFG fish by H.E", $No(1)$, $H = [2]$, $OT = [172, 86]$

$SPF = \sin\left(5 \cos(v) \sin(u)^2 + 2\right) + 2 \sin(u) \cos(v)^2 + 3$

In Italiano　　　　　by M.I

Parallelismo

In una canzone taliana, a dire il vero poco famosa, ma che mi piace molto, Erica Boschiero canta:

"Credo nell' amore libero e nell' opportunità che due rette parallele un giorno chissà mai si incontrino, fissino un appuntamento e chissà poi che nascerà…".

In realtà nella geometria euclidea quest' opportunità non esiste. Il parallelismo, col relativo V postulato di Euclide, è il concetto cardine su cui si fonda tutta la geometria classica. Basti pensare ai teoremi sull' equivalenza dei parallelogrammi. Secondo i canoni della concezione classica, aristotelica il V postulato non si può considerare evidente, come si addice ai principi di una teoria scientifica. Il che ha indotto ad una sua crisi, con l' introduzione di nuove geometrie, dette perciò non euclidee: in particolare la geometria iperbolica, con la negazione del postulato stesso. In quest' ultima si conserva però l' assioma euclideo che per due punti distinti passa una e una sola retta.

Le tre geometrie:euclidea, iperbolica ed ellittica, in cui al triangolo viene attribuita la proprietà di avere somma degli angoli interni rispettivamente uguale, minore, maggiore di due angoli retti, sono coerenti ma evidentemente contraddittorie. Ricordiamo che la dimostrazione che "la somma degli angoli interni di un triangolo" è uguale ad un angolo piatto si serve proprio del postulato delle parallele. Poincarè aveva sostenuto che la geometria euclidea e quindi l' assunzione del parallelismo, sarebbe stata in ogni caso la più comoda. Lo è in effetti per le nostre esigenze quotidiane. In ambito di fisica relativistica si rivela più comoda la geometria ellittica , come Einstein dimostra nella teoria della relatività generale.

In English

Parallelism

In an Italian song, to tell the truth a little famous, but that I like very much, Erica Boschiero sings:

"I believe in free love and the opportunity that two parallel lines, never knows, one day meet, fix an appointment and who knows what will come ...".

In fact in Euclidean geometry this opportunity does not exist. The parallelism with the relative Euclid's fifth postulate, is the key concept on which all the classical geometry. Just think of the theorems on the equivalence of parallelograms. According to the canons of classical conception, Aristotelic, the fifth postulate can not be considered obvious, as befits the principles of a scientific theory. Which has led to its crisis with the introduction of new geometries, and therefore called non-Euclidean: in particular, hyperbolic geometry, with the negation of the fifth postulate. In this' last will, however, retains the Euclidean axiom that for two distinct points passes one and only one straight line.

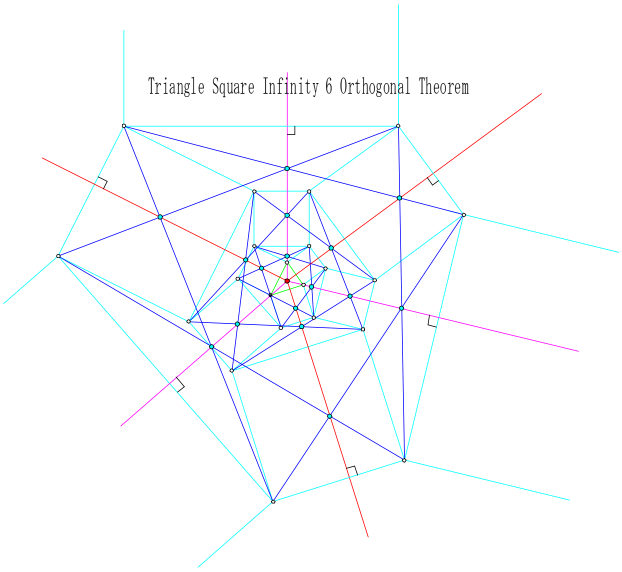
The three geometries: Euclidean, hyperbolic and elliptic, in which to the triangle is assigned the property to have the sum of the interior angles respectively equal to, less than, greater than two right angles, are consistent but evidently contradictory. Recall that the demonstration that "the sum of the interior angles of a triangle" is equal to a straight angle, you need right of the parallel postulate. Poincaré had argued that Euclidean geometry and thus the assumption of parallelism, in any case would have been the most comfortable. It is in fact for our daily needs. In the field of relativistic physics proves more convenient elliptic geometry, as shown in the Einstein theory of general relativity.

"Paralell" by H.E

平行線は、無限性のいい例である。、数学上には、無限と有限が出てくるが、無限大と有限の数値に対応し、不思議な、思いになる。無限宇宙を想像することは、何か神妙な気持ちになる。この気持ちが、なければ,夢多く無限に文明は進歩しないと思う。

どこまで行っても交わらない、どこまで行っても離れない。等間隔空間の存在は、何ともいえない、単純性を感じる。3 つの平行線の 6 交点が、楕円上にあることを使い、定理を円から楕円に今回書き換えられた。いつまでたっても役立つだろう。平行線の無限性は、非ユークリッドで、変な有限性を持ったが、私は無限性のまま、時代が進歩することを願ってやまない。6 垂線の正方形の辺の平行無限拡大が、新たな数学を生むだろう。

ここに、6 垂線の定理を掲載する

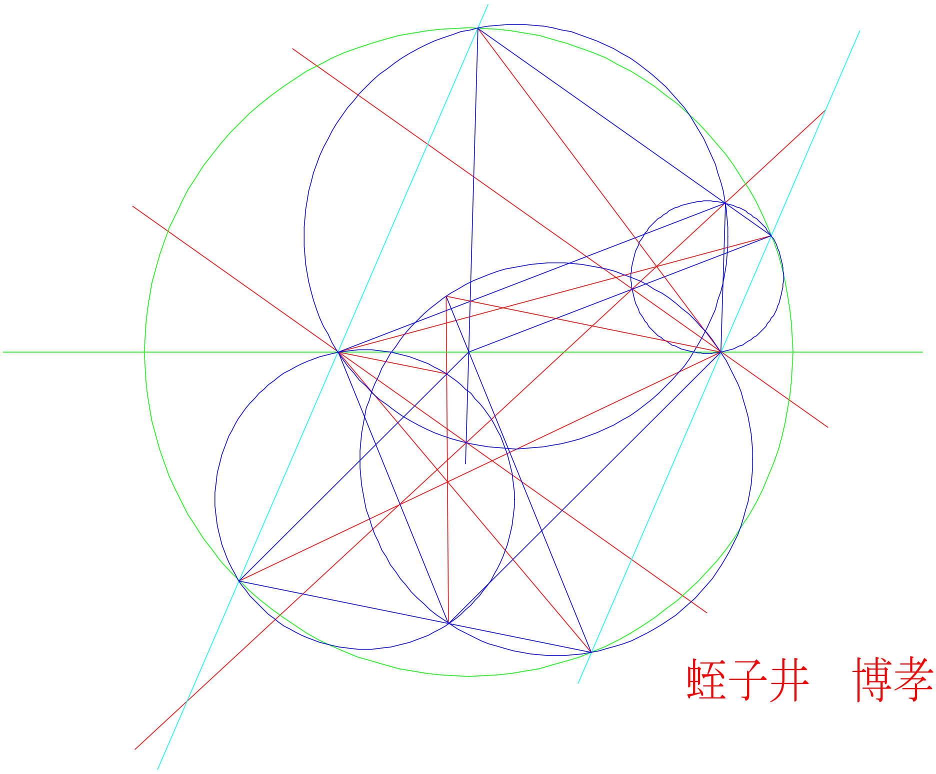


Paralel lines are a good Example of Infinity.in mathe field, there are infinity and finity,and it related to number infinity and finity,and we feel strangeness for them.when we image Cosmos is endless,we can guess Science will have endless progress.Paralell lines never closs in far far.....

Paralell never separates in far far a way. That To keep same distance between paralell lines is un imagable simplisity,we think. 6 closs points of 3 paralell pair lines exsit on one ellipse,and this fact make theorem changed.so,this theorem will be useful foever.Paralell lines have finity-strangeness by nonEuclid geometry,but I hope time will walk with the infinity of Paralell lines.

At Last, our Theorem of 6 ortholines clossing on one point have the infinity extension of Square Edge Paralell,and this will give New mathe concepts. Here is the Theorem.Enjoy this.

7　DOVAL



蛭子井　博孝

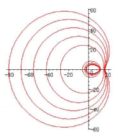
中途図形

About Oval　(Doval)

Hirotaka　Ebisui

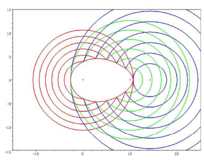
Oval Research Center

IWAKUNI near HIROSHIMA



Confocal Doval

共焦点 Doval



Three　focus　points

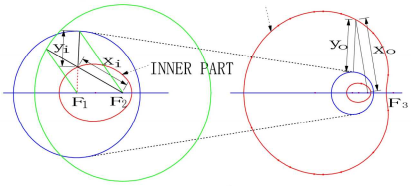
Trade Mark　(E_R=0.9,E_L=0.6)

2. Definition of Doval

We call inner and outer part of Oval as DOVAL

Inner and Outer Part of the Oval =Doval

$x_i : y_i = X_o : y_o = m : n$　OUTER PART



$m r_1 \pm n r_2 = k c$

Fig.4. Definition of Doval using Ratio and Director Circle

Radius of Director circle = kc/m,　kc/n

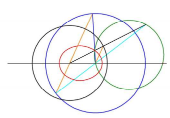
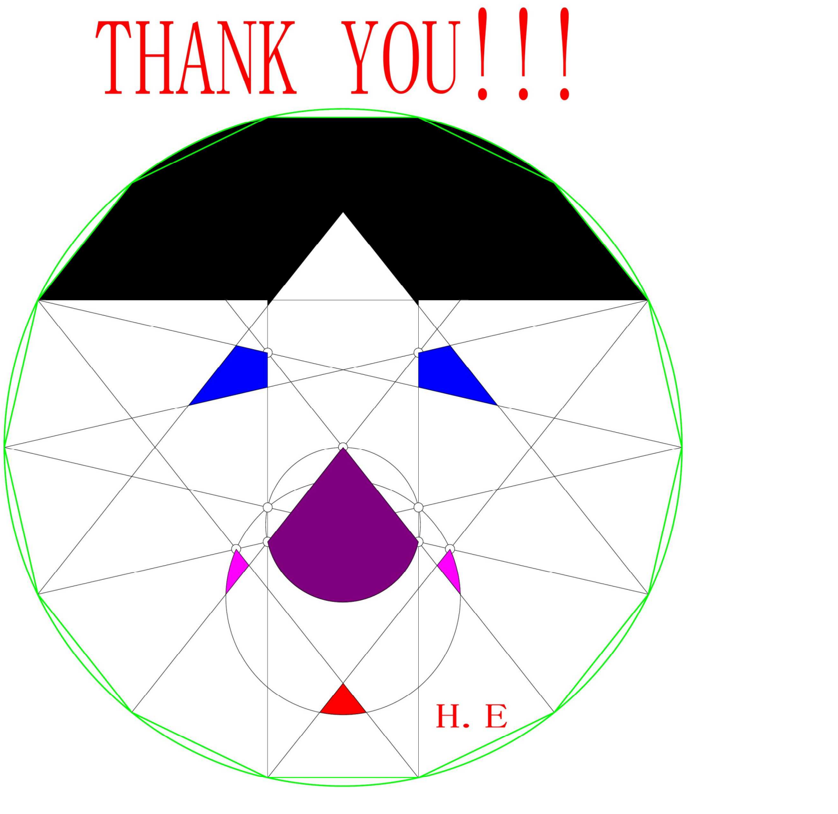


Fig.5 Doval innnerpart defined by two director circles

8　Geomec 14



数学日記

geoMathe Diary 38th

IDEAL and Passion No.11

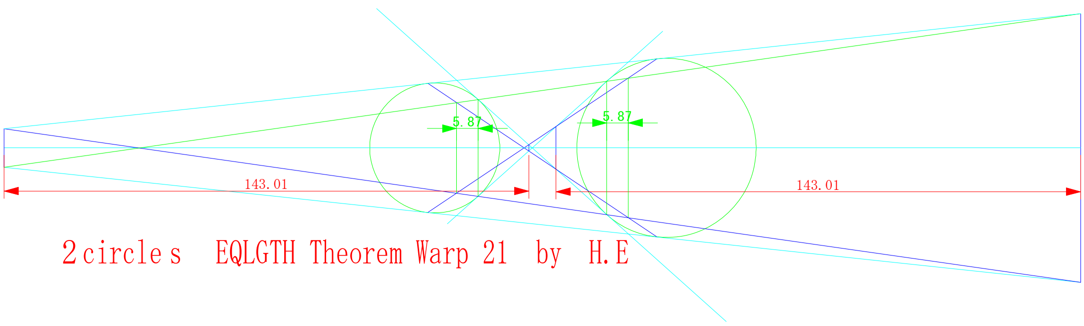
Hirotaka Ebisui ,Maria Intagliata

Star

by M.I

contents

5/28 今回で 11 回,DOC の代わりに、
改めて、自己紹介を載せました。
3.の正三角形は、力作と自負している
4．の数表　3 ページ使う 5，6 は，いつもの調子
今日から、梅雨が始まっている。
薄暗き部屋に明るい Display、梅雨でも動く我かの宝
なお、これを掲載しているブログ凸凹 LIPY として、
新装開店しました。http://hoval.blogzine.jp/です。
今回もできそう。あいがとう　　　(H.E)



2circles　EQLGTH Theorem Warp 21　by　H.E

卵形線研究センター
http://hoval.blogzine.jp/

2013-5-30

2. Let us introduce by our self

In Italiano

Mi presento

Io, Maria Intagliata, nata a Siracusa, la bella città di Archimede, il 17/7/1950, mi ritengo una donna fortunata. Ho una bella figlia ed un marito favoloso e ho fatto nella vita quello che da sempre avrei voluto fare: l’insegnante di matematica. Ho dovuto lottare molto per realizzarmi ed oggi, in pensione, vengo ripagata, soprattutto dagli affettuosi messaggi di stima dei miei ex studenti su FB. E’ viva in me la passione per la matematica e il mio lavoro, quasi sempre al primo posto, sacrificando la famiglia. Grazie alle mie creazioni in 3D online, ho incontrato un matematico e un uomo straordinario: il Prof.Hirotaka Ebisui. Un tipo strano? E’ un eufemismo, ma adesso è il mio più caro amico. E’ l’amante più appassionato e ricambiato della Regina delle Scienze che io abbia mai conosciuto. Date un’occhiata a questo blog e mi darete ragione.

In English

I introduce myself

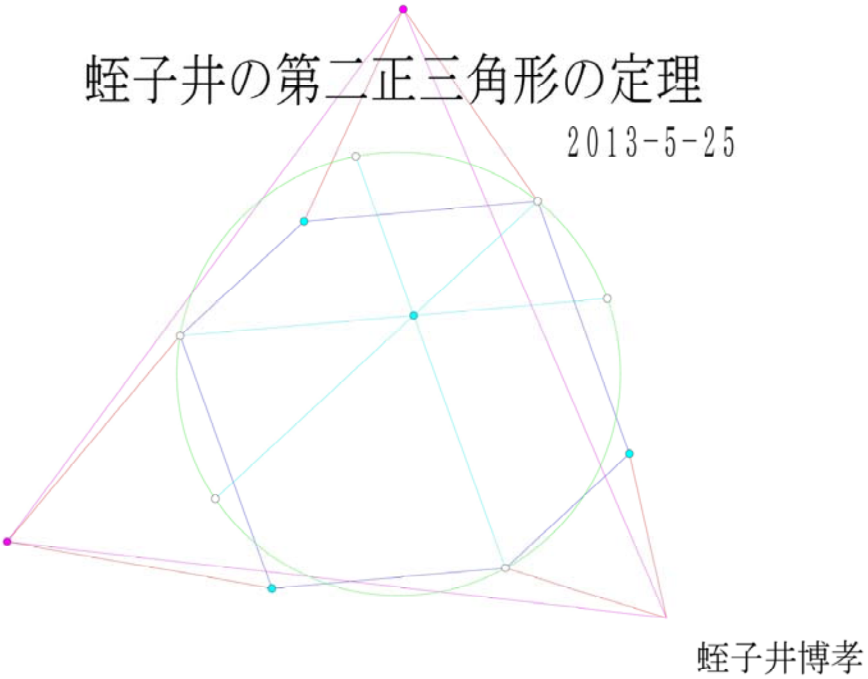
I, Maria Intagliata, born in Syracuse, the beautiful city of Archimedes, on the 7/17/1950, I consider myself a lucky woman. I have a beautiful daughter and a fabulous husband and I have done in my life that I have always wanted to do: the math teacher. I had to struggle a lot to realize myself and now, in retirement, I am rewarded, particularly by the affectionate messages estimation of my former students on FB. Is alive in me the passion for mathematics and my work, almost always in first place, sacrificing family. Thanks to my creations in 3D online, I met a mathematician and an extraordinary man: the Prof.Hirotaka Ebisui. A strange? It is an euphemism, but it is my dearest friend now. He’s the most passionate lover and returned of the Queen of Sciences that I have ever known. Take a look at this blog and I'll agree.

蛭子井博孝

1950-4-20 生まれ 19 歳から幾何に没頭応用物理を出るが、数学の教師をしその後高等研究機関の研究員そして再び教師、1995 年退職後卵形線研究センターを開設以後研究業一筋最近マリア女史に出会い，楽しく数学をしている。成果は、この日記にて公開。

Iwas born in 1950-4-20, at 19 year old I became crazy about geometry. I studied Applied Physics in University,but I was a teacher of high school,twice. Between the two I was a researcher of Advanced Research Laboratory,after retire,at 1995, I opened Oval Reaseach Center,and I researched Geometry of Oval and some etc. Resenty I met Maria Research,and we enjoy mathe.my and her results are opened here.

3 on Regular Triangle Theorems



> # num by.he:

> **for** n **from** 2 **to** 10000 **do** $ft := n : fp := 2 : nc := 0 : H := 0$:**for** p **from** 1 **to** ft **do if** $ft = 0$ **then break elif** ft **mod** $fp = 0$ **then** $nc := nc + 1 : ft := \frac{ft}{fp} : H := H + fp : FT \| nc := fp :$ **else** $fp := nextprime(fp)$ **fi**:**od**: : **if** $nc \neq 1$ **and** $\mathrm{floor}\left(evalf\left(H^{\frac{1}{2}}\right)\right)^2 = H$ **then** $print\left(Num\ n[FCsum = [[seq(FT \| j, j = 1..nc)], H]] = \left[simplify\left(H^{\frac{1}{2}}\right)\right]^2\right)$ **fi**: **od**:

$$Num\ 4_{FCsum = [[2, 2], 4]} = [2]^2$$
$$Num\ 14_{FCsum = [[2, 7], 9]} = [3]^2$$
$$Num\ 20_{FCsum = [[2, 2, 5], 9]} = [3]^2$$
$$Num\ 24_{FCsum = [[2, 2, 2, 3], 9]} = [3]^2$$
$$Num\ 27_{FCsum = [[3, 3, 3], 9]} = [3]^2$$
$$Num\ 39_{FCsum = [[3, 13], 16]} = [4]^2$$
$$Num\ 46_{FCsum = [[2, 23], 25]} = [5]^2$$
$$Num\ 55_{FCsum = [[5, 11], 16]} = [4]^2$$
$$Num\ 66_{FCsum = [[2, 3, 11], 16]} = [4]^2$$
$$Num\ 94_{FCsum = [[2, 47], 49]} = [7]^2$$
$$Num\ 98_{FCsum = [[2, 7, 7], 16]} = [4]^2$$
$$Num\ 140_{FCsum = [[2, 2, 5, 7], 16]} = [4]^2$$
$$Num\ 152_{FCsum = [[2, 2, 2, 19], 25]} = [5]^2$$
$$Num\ 155_{FCsum = [[5, 31], 36]} = [6]^2$$
$$Num\ 158_{FCsum = [[2, 79], 81]} = [9]^2$$
$$Num\ 168_{FCsum = [[2, 2, 2, 3, 7], 16]} = [4]^2$$
$$Num\ 171_{FCsum = [[3, 3, 19], 25]} = [5]^2$$
$$Num\ 183_{FCsum = [[3, 61], 64]} = [8]^2$$
$$Num\ 186_{FCsum = [[2, 3, 31], 36]} = [6]^2$$
$$Num\ 189_{FCsum = [[3, 3, 3, 7], 16]} = [4]^2$$
$$Num\ 200_{FCsum = [[2, 2, 2, 5, 5], 16]} = [4]^2$$
$$Num\ 203_{FCsum = [[7, 29], 36]} = [6]^2$$
$$Num\ 225_{FCsum = [[3, 3, 5, 5], 16]} = [4]^2$$
$$Num\ 240_{FCsum = [[2, 2, 2, 2, 3, 5], 16]} = [4]^2$$
$$Num\ 255_{FCsum = [[3, 5, 17], 25]} = [5]^2$$

5　3D by M.I

1.Red star

8*cos(u)*cos(v)*(abs(cos(2*v))^1.2+abs(sin(2*v)) ^1.2)^(-3.5)*(abs(cos(2*u))^1.2+abs(sin(6*u))^1.2)^(-2)

2*sin(sin(sin(sin(sin(18*u)))))*(abs(cos(2*u))^1.2 +abs(sin(6*u))^1.2)^(-2)

8*cos(u)*sin(v)*(abs(cos(2*v))^1.2 +abs(sin(2*v))^1.2)^(-3)*(abs(cos(2*u))^1.2 + abs(sin(6*u))^1.2)^(-2)

2. Mostriciattolo che somiglia ad un topo...

X=(u -u^3/3 + u*v^2)*cos(u)*cos(v)

Y=0.5*(u^2 - v^2)*sin(u)*sin(v)

Z=(v -v^3/3 + v*u^2)*cos(u)*sin(v)

3.Fractal star

X=8*cos(u)*cos(v)*(abs(cos(2*v))^1.2+abs(sin(2*v)) ^1.2)^(-3.5)*(abs(cos(2*u))^1.2+abs(sin(2*u))^1.2)^(-3)

Y=2*sin(sin(sin(sin(sin(18*u)))))*(abs(cos(2*u))^1.2 +abs(sin(2*u))^1.2)^(-3)

Z=8*cos(u)*sin(v)*(abs(cos(2*v))^1.2 +abs(sin(2*v))^1.2)^(-3)*(abs(cos(2*u))^1.2 + abs(sin(2*u))^1.2)^(-

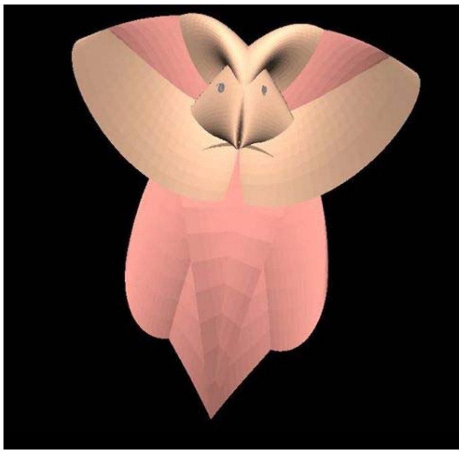
4.STAR

X=8*cos(u)*cos(v)*(abs(cos(2*v))^1.2+abs(sin(2*v))))^1.2)^(-3)*(abs(cos(2*u))^1.2+abs(sin(2*u))^1.2)^(-3)

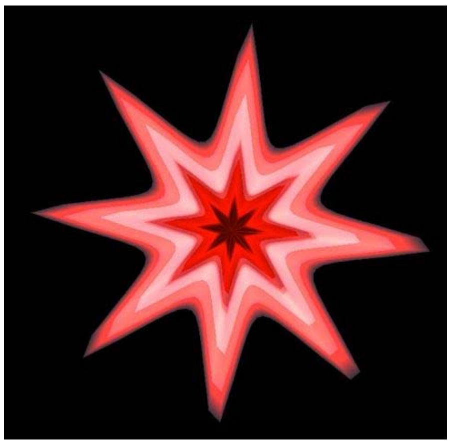
Y=2*sin(u)*(abs(cos(2*u))^1.2 +abs(sin(2*u))^1.2)^(-3)

Z=8*cos(u)*sin(v)*(abs(cos(2*v))^1.2 +abs(sin(2*v))^1.2)^(-3)*(abs(cos(2*u))^1.2 + abs(sin(2*u))^1.2)^(-3)

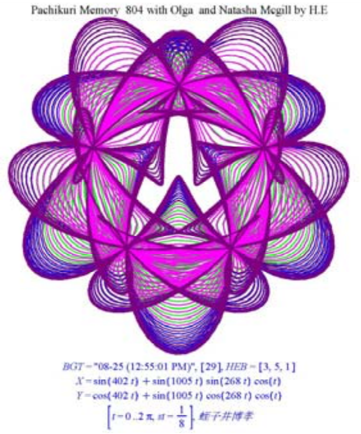
1

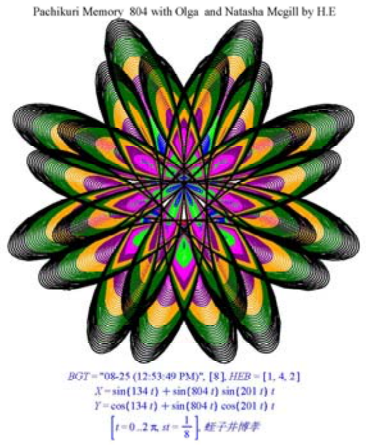

2


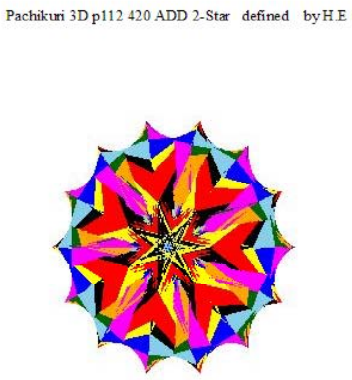
3

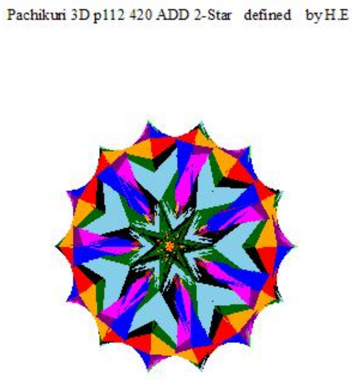

4


6 2D 3D BY H.E


Pachikuri Memory 804 with Olga and Natasha Mcgill by H.E
BGT = "08-25 (12:55:01 PM)", [29], HEB = [3, 5, 1]
X = sin(402 t) + sin(1005 t) sin(268 t) cos(t)
Y = cos(402 t) + sin(1005 t) cos(268 t) cos(t)
[t = 0..2 π, st = 1/8], 蛭子井博孝


Pachikuri Memory 804 with Olga and Natasha Mcgill by H.E
BGT = "08-25 (12:53:49 PM)", [8], HEB = [1, 4, 2]
X = sin(134 t) + sin(804 t) sin(201 t) t
Y = cos(134 t) + sin(804 t) cos(201 t) t
[t = 0..2 π, st = 1/8], 蛭子井博孝


Pachikuri 3D p112 420 ADD 2-Star defined by H.E


Pachikuri 3D p112 420 ADD 2-Star defined by H.E

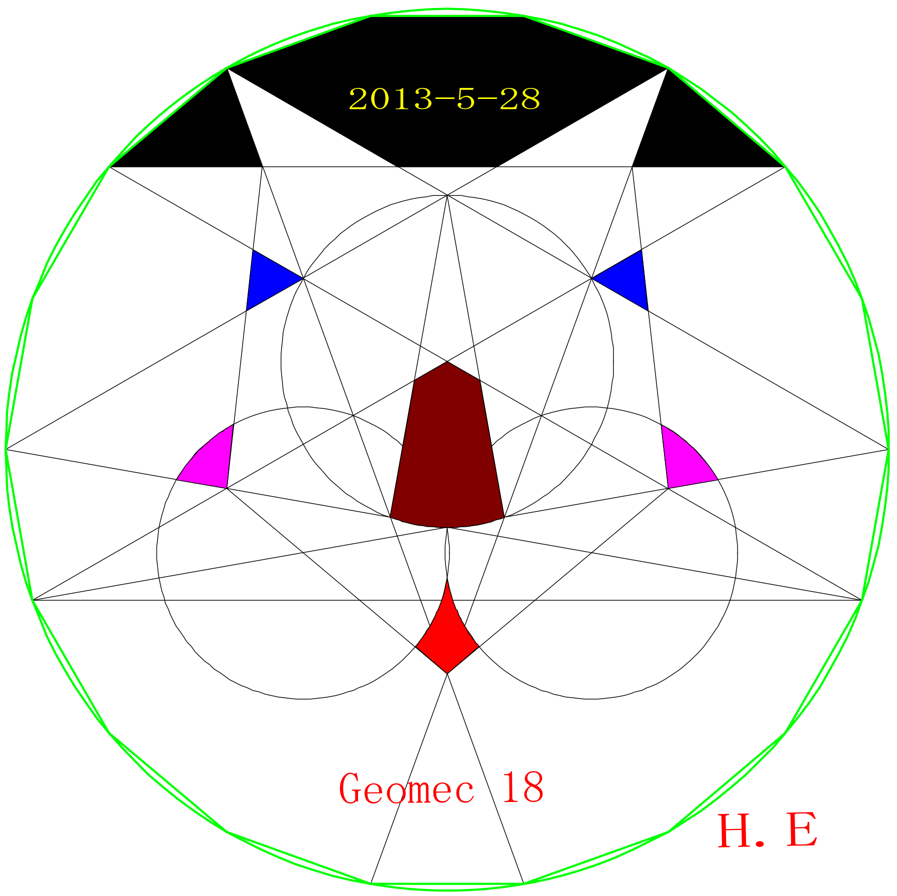
7　Doval　Property　BY H.E

The definition of Doval are extended Curves（of elilipse） that have constant ratio between two distance , from a points and a circle, and Doval can be defined and drawed by circle and paralell lines. Now we found more than 5 diffirent Draw methods. This have right and left excentlicity, 3 foci, and one asymmetry axes. Area of Doval is defined as sum of in and out closed area.and Doval is also defined as the projection on axes direction plain of intersection of two conic that have different vertex angles and paralell sysmtery axes. and the tangent lines on a point on Doval can be defined and drawed by some Compositions. As forth oder algeblic curves, Doval are expressed by xy cordinate. Doval is also extended to The Curve that have more than 3 foci named as Chocoid,and Tajicoid.Doval have an Invariant Equation.

see http://hoval.blogzine.jp/hoval/

8 GEOMEC 18 +Peom

Thank　you!!!



梅雨はしり　出会った人と　幾何談義

Rain season began,
on just the day,
we met in JR,
and talk about gemetry with smile.

数学日記

geoMathe Diary 39th

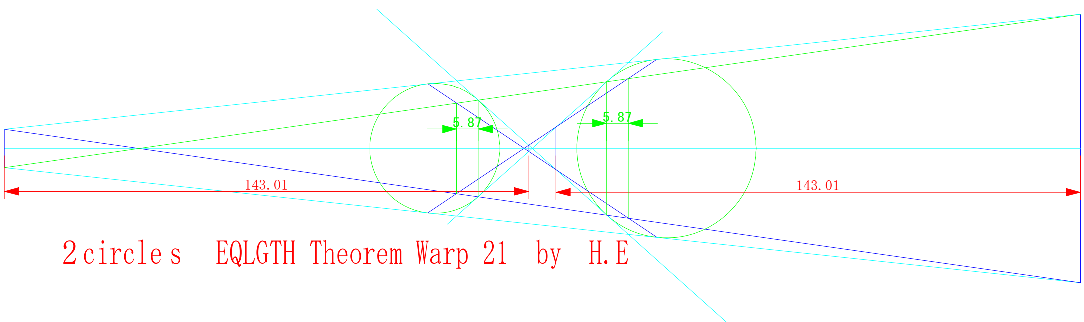
IDEAL and Passion No.12

Hirotaka Ebisui and Maria Intagliata

Spiral

contents

6-3 39th diary の DeadLine。Mari から Circle の doc を受け取った。Myblog の改正をして、きょうは、この編集に取りかかる。マリアさんの方は終わっている。わたしの、３，５，６，７がまだである。
忙しく、日記の原稿創れども.人の手になる,我らの日記、覚悟　の上。とにかく人のために献身的にやるだけだ。自分の手柄なんかに成りはしない.しかし、神様もお見通し。ああ、良き良き、人生、自嘲的になっている.ごめんなさい。(H.E)



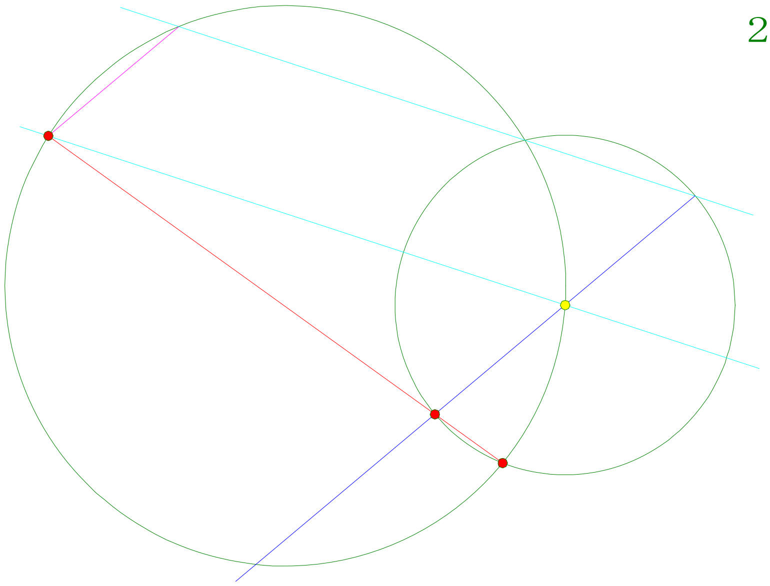
2circles　EQLGTH Theorem Warp 21　by　H.E

卵形線研究センター
http://hoval.blogzine.jp/

2 on 2 Circles

Two circle one Paralell theorem

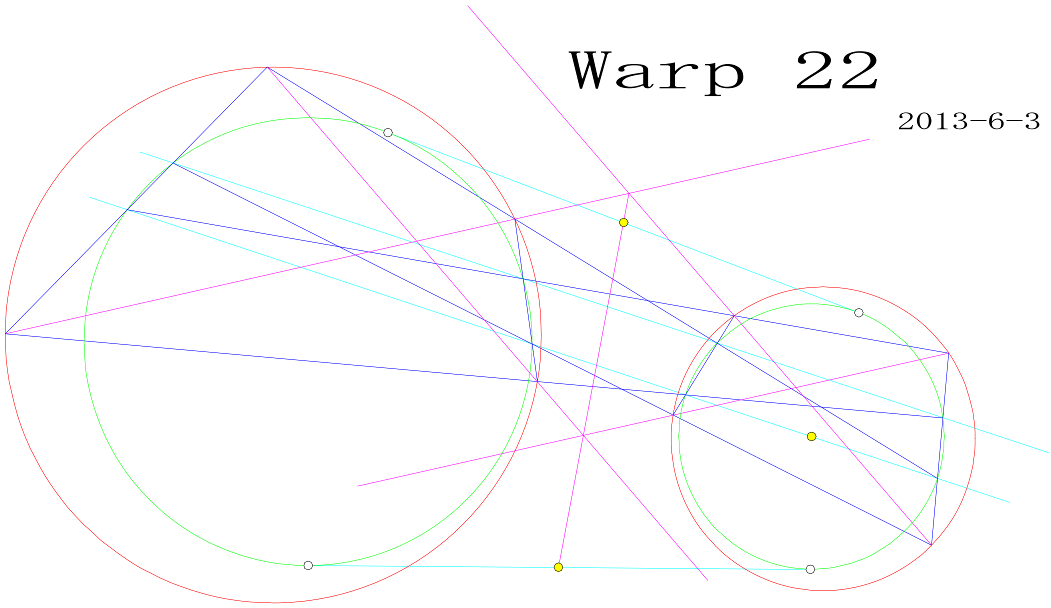
2013-6-3



蛭子井博孝

Warp 22

2013-6-3



蛭子井博孝

> # *number factolize PG and sumH*^{FcH} = H^m **by** *H.E* :

>

> *ifactor*(603);

$$(3)^2\ (67) \quad (1)$$

> **for** m **from** 2 **to** 13 **do for** n **from** 2 **to** 3125 **do** $ft := n : fp := 2 : nc := 0 : SHfc := 0 : sfc := 0$: **for** p **from** 1 **to** ft **do if** $ft = 0$ **then break elif** ft **mod** $fp = 0$ **then** $nc := nc + 1 : ft := \frac{ft}{fp} : FT \| nc := fp : SHfc := SHfc + fp^{fp} : sfc := sfc + fp$:**else** $fp := nextprime(fp)$ **fi**:**od**: $NF := [seq(FT \| j, j = 1..nc)]$:**if** $\mathrm{floor}\left(evalf\left(SHfc^{\frac{1}{m}}\right)\right)^m = SHfc$ **then** $SHH := 0$: **for** e **from** 1 **to** nc **do** $SHH := SHH + [FT \| e]^{FT \| e}$:**od**: $print\left(n = NF, SHH = \left\{simplify\left(SHfc^{\frac{1}{m}}\right)\right\}^m\right)$ **fi**: **od**:**od**:

$$2 = [2],\ [2]^2 = \{2\}^2$$
$$16 = [2, 2, 2, 2],\ 4\ [2]^2 = \{4\}^2$$
$$27 = [3, 3, 3],\ 3\ [3]^3 = \{9\}^2$$
$$512 = [2, 2, 2, 2, 2, 2, 2, 2, 2],\ 9\ [2]^2 = \{6\}^2$$
$$3125 = [5, 5, 5, 5, 5],\ 5\ [5]^5 = \{125\}^2$$
$$3 = [3],\ [3]^3 = \{3\}^3$$
$$4 = [2, 2],\ 2\ [2]^2 = \{2\}^3$$
$$3125 = [5, 5, 5, 5, 5],\ 5\ [5]^5 = \{25\}^3$$
$$16 = [2, 2, 2, 2],\ 4\ [2]^2 = \{2\}^4$$
$$27 = [3, 3, 3],\ 3\ [3]^3 = \{3\}^4$$
$$5 = [5],\ [5]^5 = \{5\}^5$$
$$256 = [2, 2, 2, 2, 2, 2, 2, 2],\ 8\ [2]^2 = \{2\}^5$$
$$3125 = [5, 5, 5, 5, 5],\ 5\ [5]^5 = \{5\}^6$$
$$7 = [7],\ [7]^7 = \{7\}^7$$
$$2592 = [2, 2, 2, 2, 2, 3, 3, 3, 3, 3],\ 5\ [2]^2 + 4\ [3]^3 = \{2\}^7$$
$$11 = [11],\ [11]^{11} = \{11\}^{11}$$
$$13 = [13],\ [13]^{13} = \{13\}^{13} \quad (2)$$

> *What is This NUMTable Meaning?. I want to ask this to All who read this Pg OutPut List. I want know this meaning. 7^7=7^7*

4　　3D by M.I

1.Spirale...

x=1.15^v*(sin(u)^2 *sin(v))

y=1.15^v*sin(sin(sin(sin(sin(sin(8*u-5*v))))))*cos(16*u))^2

z=1.15^v*(sin(u)^2 *cos(v))

2.Butterfly on flower...

x=1.15^v*(sin(u)^2 *sin(v))

y=1.15^v*(sin(sin(sin((sin(sin(sin(7*u-7*v)))))))*cos(7*v-5*u)^2)

z=1.15^v*(sin(u)^2 *cos(v))

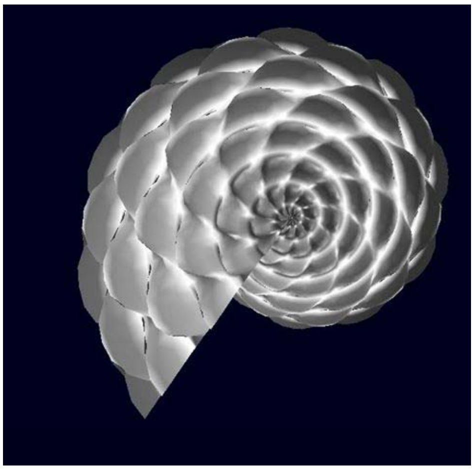
3.White flower

x=3.5*cos(u)*cos(v)*sin(v)

y=2*sin(u)*sin(2*v)

z=0.8*pi^cos(sin(cos(7*u-7*v)))*sin(6*v-5*u)

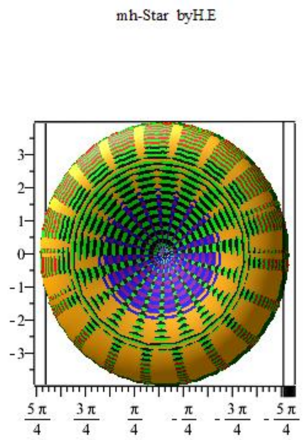
1

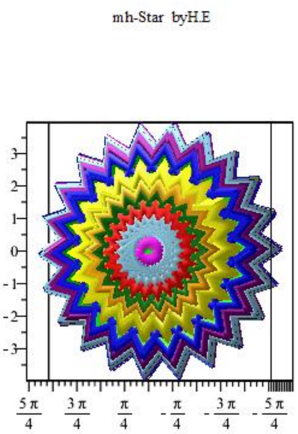


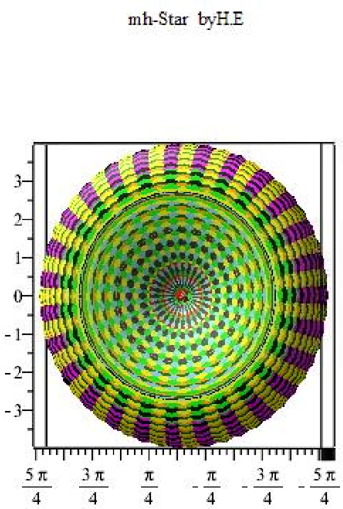
2

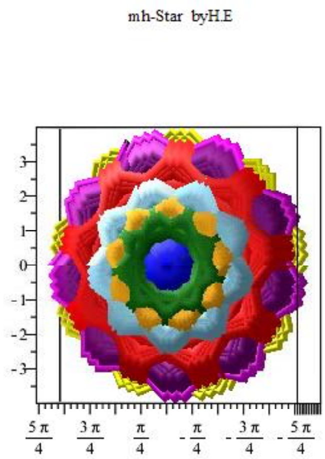
3

5 3d by H.E










```
> with(plots);
> CP := [red, yellow, blue, green, magenta, "Purple", "Orange", "DarkGreen", "SkyBlue", black];
> ifactor(507);
> for n to 20 do PS || n := evalf(fsolve(S^Pi-Pi^n = 0, S), 5); print([PS || n]^Pi = Pi^n) end do;
> c := 0; for h to 8 do for m to 13 do c := c+1; for ds to 10 do x := 4*cos(PS || m*u)*sin(PS || h*v); y := sin(PS || m*v)*cos(PS || h*v); z := 4*sin(PS || m*u)*sin(PS || h*v); EQG || ds || c := plot3d([x, y, z], u = 0 .. 2*Pi, v = (1/10)*(2*(ds-1))*Pi .. 2*Pi*ds*(1/10)+2*Pi*(1/10), color = CP[`mod`(ds+c+1, 10)+1], numpoints = 800, orientation = [90+20, 90], scaling = constrained, style = surface, title = " mh-Star  byH.E") end do; print(display(seq(EQG || j || c, j = 1 .. 10))); print("mh-Star by H.E", No(c), HM = [h, m]); print(X[c] = x); print(Y[c] = y); print(Z[c] = z) end do end do;
```

6 CIRCLE

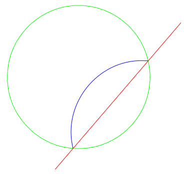
In Italiano Il cerchio by Maria Intagiata

Il cerchio è la figura per eccellenza della geometria , di cui sembra rappresentare la perfezione e la bellezza. Ma è anche la figura che più ha impegnato ed affascinato il pensiero matematico e non solo, fin dalle origini. E’ centrale nell’opera di Platone, ma pure del filosofo Ralph Waldo Emerson, che, nel suo saggio “Circles”, introduce la figura di cerchi in espansione, come simbolo dell’avanzamento dello spirito. E per Niccolò Cusano l’uomo non potrà mai conoscere Dio finché è in questa vita, ma nell’infinito può risolversi in identità col cerchio, cioè con l’infinito stesso. Fu lo stesso Cusano, nell’opera “de quadratura circuli”a dimostrare l’impossibilità della quadratura del cerchio, evidentemente per il profondo legame della figura con la irrazionalità del pi greco. Com’è noto, tale problema, assieme alla trisezione dell’angolo e alla duplicazione del cubo, è stato per secoli oggetto di studio dei matematici, che hanno trovato risultati importanti sia nel calcolo integrale dell’area che del perimetro del cerchio. Vi sono, poi, cerchi molto nobili, come quello “dei nove punti”, col relativo triangolo di Feurback (formato dai tre punti di tangenza del cerchio con gli excircles di Kimberling), i cerchi di Morley, di Apollonio, ma anche di Napoleon, molto cari e familiari al Prof. Ebisui. E che dire del “disco di Poincarè”, in cui è rappresentata la geometria iperbolica, con una tassellazione poligonale del piano, come in molte opere litografiche di Escher.

In English

The circle is the figure par excellence of geometry, which seems to represent the perfection and beauty. But it is also the figure that most engaged and fascinated mathematical thinking and not just, from the beginning. It's central in the work of Plato, but also of the philosopher Ralph Waldo Emerson, who, in his essay "Circles", introduces the figure of expanding circles as a symbol of how far the spirit. And to Nicholas of Cusa man can never know God as long as he is in this life, but in the infinite can result in identity with the circle, that is the same with the infinite. It was the same Cusa, in his work "de quadrature circuli" to demonstrate the impossibility of squaring the circle, apparently to the deep bond of the figure with the irrationality of pi greek. As is well known, this problem, together with the trisection of the angle and the duplication of the cube, was for centuries the object of study of mathematicians, who have found significant results in both the integral calculus of the area of the perimeter of the circle. There are, then, looking very noble, such as the one "of the nine points," with its triangle Feurback (formed by the three points of tangency of the circle with the excircles of Kimberling), the circles of Morley, Apollonius, but also of Napoleon, very dear and familiar to Prof. Ebisui. There’s, then,"Poincaré disk", that represents hyperbolic geometry, with a polygonal tessellation of the plane, as in many lithographic works of Escher.

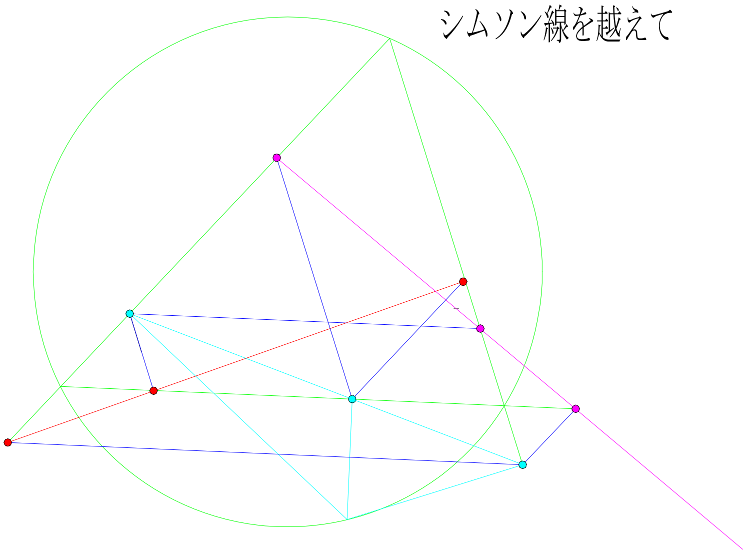
円　by Hirotaka Ebisui



円とは何か、１．一点から等距離にある店の集まり
２．周が一定で、面積最大のもの
３．2 つに折り曲げたら、大きい方に小さい方が含まれ、はみ出さないもの。
円は、2 直線の上の 3 点づつ、6 点の定理を、円周上 6 点に置き換えられる。このようなすべての定理は、何か、まだ不明。
円と三角形で、有名な定理に、シムソンの定理がある。この定理が、最近平行線を付加して、新しい 2 つの共線を得た。
ここにその図を載せる
後、円と円周率については、多くの本がある。

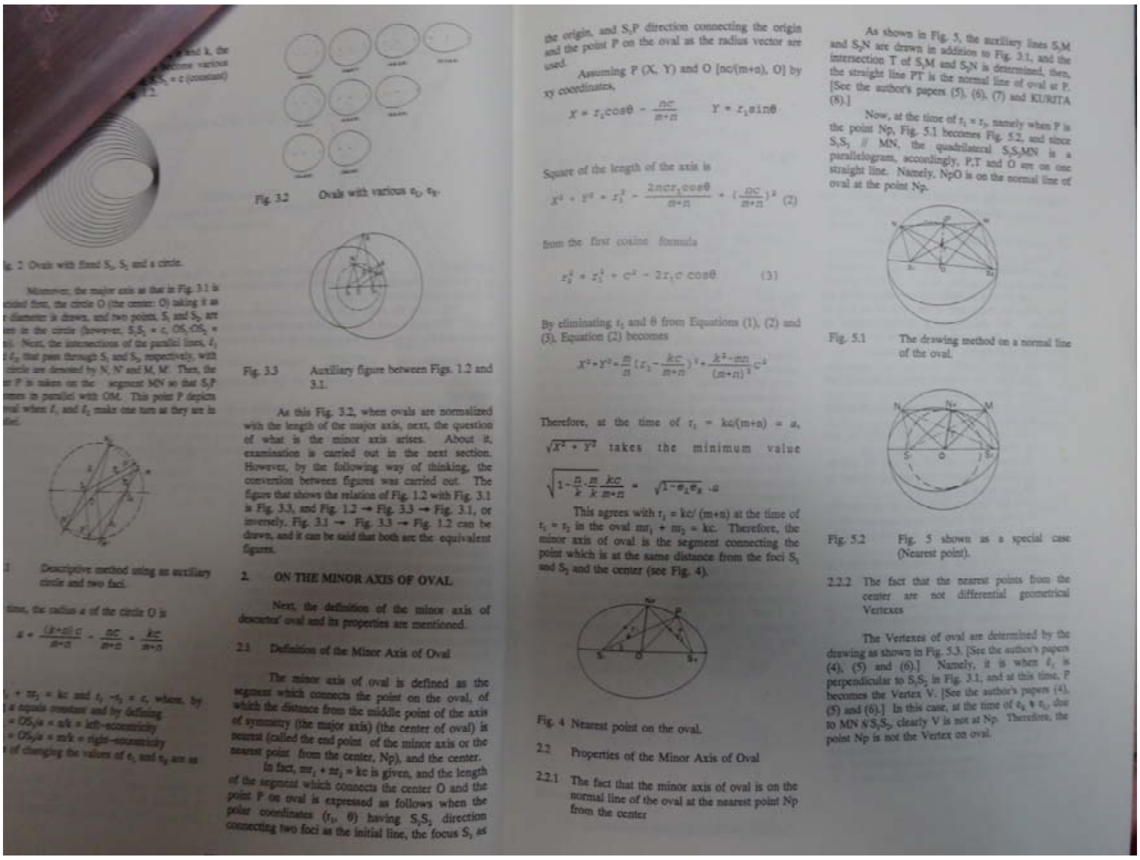
垂直右回り平行蛭子井線と垂直左回り平行蛭子井線

シムソン線を越えて



Circle is defined by 3 Method.
one is that same length points from one points
two is that bigest area figure with same circumference
three .see figure that show biger part inclode smaler part.
As circlce and triangle theorem Simon theorem is famous.
This is reconstructed by paralell lines showing it on upper figure.

7 Minor Axes of Doval



...and k, the ...become various ...S_1S_2 = c (constant) ...1.2

ig. 2 Ovals with fixed S_1, S_2 and a circle.

Moreover, the major axis as that in Fig. 3.1 is ...ided first, the circle O (the center: O) taking it as ...diameter is drawn, and two points, S_1 and S_2, are ...en in the circle (however, S_1S_2 = c, $OS_1{\cdot}OS_2$ = ...). Next, the intersections of the parallel lines, ℓ_1 ...ℓ_2, that pass through S_1 and S_2, respectively, with ...circle are denoted by N, N' and M, M'. Then, the ...t P is taken on the segment MN so that S_2P ...mes in parallel with OM. This point P depicts ...val when ℓ_1 and ℓ_2 make one turn as they are in ...llel.

...3 Descriptive method using an auxiliary circle and two foci.

...time, the radius a of the circle O is

$$a = \frac{(k+n)c}{m+n} - \frac{nc}{m+n} = \frac{kc}{m+n}$$

...$+ mr_2$ = kc and $r_1 - r_2$ = c, where, by ...a equals constant and by defining ...$= OS_1/a$ = n/k = left-eccentricity ...$= OS_2/a$ = m/k = right-eccentricity ...of changing the values of e_1 and e_2 are as

Fig. 3.2 Ovals with various e_1, e_2.

Fig. 3.3 Auxiliary figure between Figs. 1.2 and 3.1.

As this Fig. 3.2, when ovals are normalized with the length of the major axis, next, the question of what is the minor axis arises. About it, examination is carried out in the next section. However, by the following way of thinking, the conversion between figures was carried out. The figure that shows the relation of Fig. 1.2 with Fig. 3.1 is Fig. 3.3, and Fig. 1.2 → Fig. 3.3 → Fig. 3.1, or inversely, Fig. 3.1 → Fig. 3.3 → Fig. 1.2 can be drawn, and it can be said that both are the equivalent figures.

2. ON THE MINOR AXIS OF OVAL

Next, the definition of the minor axis of descartes' oval and its properties are mentioned.

2.1 Definition of the Minor Axis of Oval

The minor axis of oval is defined as the segment which connects the point on the oval, of which the distance from the middle point of the axis of symmetry (the major axis) (the center of oval) is nearest (called the end point of the minor axis or the nearest point from the center, Np), and the center.

In fact, $mr_1 + nr_2$ = kc is given, and the length of the segment which connects the center O and the point P on oval is expressed as follows when the polar coordinates (r_1, θ) having S_1S_2 direction connecting two foci as the initial line, the focus S_1 as the origin, and S_1P direction connecting the origin and the point P on the oval as the radius vector are used.

Assuming P (X, Y) and O [nc/(m+n), 0] by xy coordinates,

$$X = r_1\cos\theta - \frac{nc}{m+n} \qquad Y = r_1\sin\theta$$

Square of the length of the axis is

$$X^2 + Y^2 = r_1^2 - \frac{2ncr_1\cos\theta}{m+n} + \left(\frac{nc}{m+n}\right)^2 \quad (2)$$

from the first cosine formula

$$r_2^2 = r_1^2 + c^2 - 2r_1c\cos\theta \qquad (3)$$

By eliminating r_2 and θ from Equations (1), (2) and (3), Equation (2) becomes

$$X^2+Y^2=\frac{m}{n}\left(r_1-\frac{kc}{m+n}\right)^2+\frac{k^2-mn}{(m+n)^2}c^2$$

Therefore, at the time of r_1 = kc/(m+n) = a, $\sqrt{X^2+Y^2}$ takes the minimum value

$$\sqrt{1-\frac{n}{k}\cdot\frac{m}{k}}\,\frac{kc}{m+n} = \sqrt{1-e_1e_2}\cdot a$$

This agrees with r_1 = kc/(m+n) at the time of $r_1 = r_2$ in the oval $mr_1 + nr_2$ = kc. Therefore, the minor axis of oval is the segment connecting the point which is at the same distance from the foci S_1 and S_2 and the center (see Fig. 4).

Fig. 4 Nearest point on the oval.

2.2 Properties of the Minor Axis of Oval

2.2.1 The fact that the minor axis of oval is on the normal line of the oval at the nearest point Np from the center

As shown in Fig. 5, the auxiliary lines S_1M and S_2N are drawn in addition to Fig. 3.1, and the intersection T of S_1M and S_2N is determined, then, the straight line PT is the normal line of oval at P. [See the author's papers (5), (6), (7) and KURITA (8).]

Now, at the time of $r_1 = r_2$, namely when P is the point Np, Fig. 5.1 becomes Fig. 5.2, and since S_1S_2 // MN, the quadrilateral S_1S_2MN is a parallelogram, accordingly, P, T and O are on one straight line. Namely, NpO is on the normal line of oval at the point Np.

Fig. 5.1 The drawing method on a normal line of the oval.

Fig. 5.2 Fig. 5 shown as a special case (Nearest point).

2.2.2 The fact that the nearest points from the center are not differential geometrical Vertexes

The Vertexes of oval are determined by the drawing as shown in Fig. 5.3. [See the author's papers (4), (5) and (6).] Namely, it is when ℓ_1 is perpendicular to S_1S_2 in Fig. 3.1, and at this time, P becomes the Vertex V. [See the author's papers (4), (5) and (6).] In this case, at the time of $r_1 \neq r_2$, due to MN // S_1S_2, clearly V is not at Np. Therefore, the point Np is not the Vertex on oval.

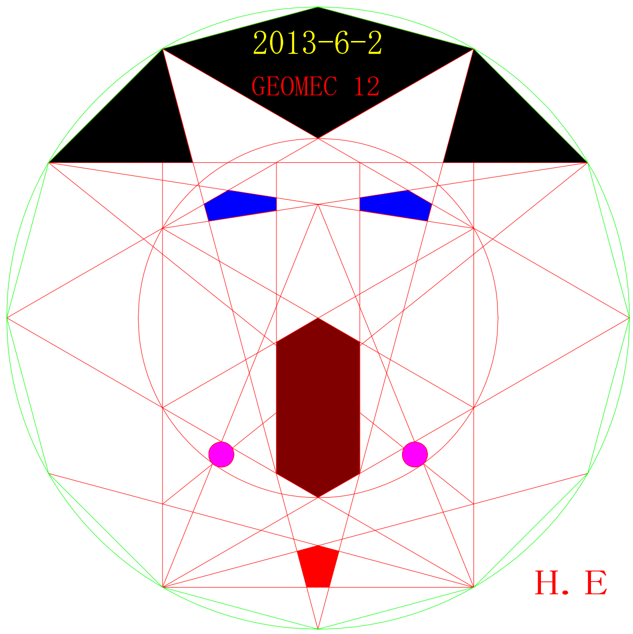
prooceeding Vol.2 p324-p3

6th International Conference on Engineering Computer Graphics and Descriptive Geometry

8　　　　　GEOMEC 12

in　３６ｔｈ

Thank　you！！！



梅雨晴れ間いつもの調子日記編

Today Fine day in Rain Season

We write Geomath Diary as usual

（H.E）

幾何数学日記　理想と情熱 － 118 －

マリアさん　ありがとう

H.E with M.I

梅雨の間の　編集終るや　幾数学　（H.E）

geoMathe Diary　理想と情熱
発行　　2013 年 6 月 18 日
編者　蛭子井博孝
著者　蛭子井博孝）
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　http://hoval.blogzine.jp/
　http://eh85.blogzine.jp/

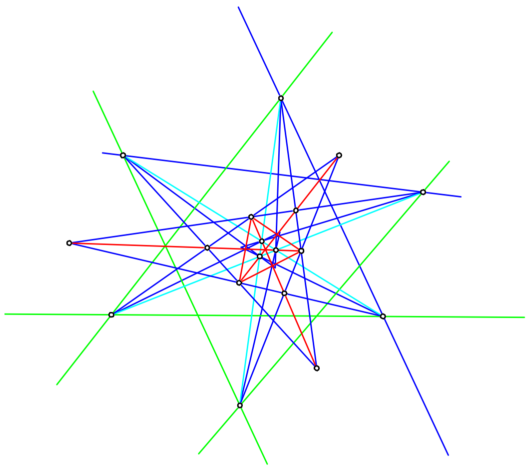
蛭子井博孝

幾何数学の小径

苦が背負う幾何数学の図(とづ)る道

星光一つ二つの次3つ

研究のレベルアップがここにあり



幾何数学研究センター
http://geomathe.com/

（Hex68）

蛭子井博孝

幾何数学　咲く今

幾何数学今が背負うや図(とづ)る径

2つ3つと星明かり

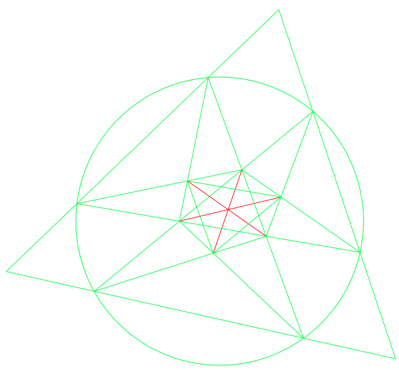
遠くを照らす今がある

1. 幾何数学の概観（平行線、次元数、ヘキサゴンの定理ほか）
2. 幾何数学の数表（数とその素数　擬似フェルマー数ほか）
3. 幾何数学の特論　（三角形重ね合わせ配置の考察）
4. 幾何数学の基本曲線論（Doval の短軸選図集ほか）

連続数の恒等式　　一例

式　$(n^2-1)^1+(n^2)^2+(n^2+1)^3 = (n*(n^2+2))^2$

n=10　　$99^1+100^2+101^3 = (10*102)^2$



幾何数学研究センター

http://gakumon87.com/

幾何数学　咲く今

まえがき

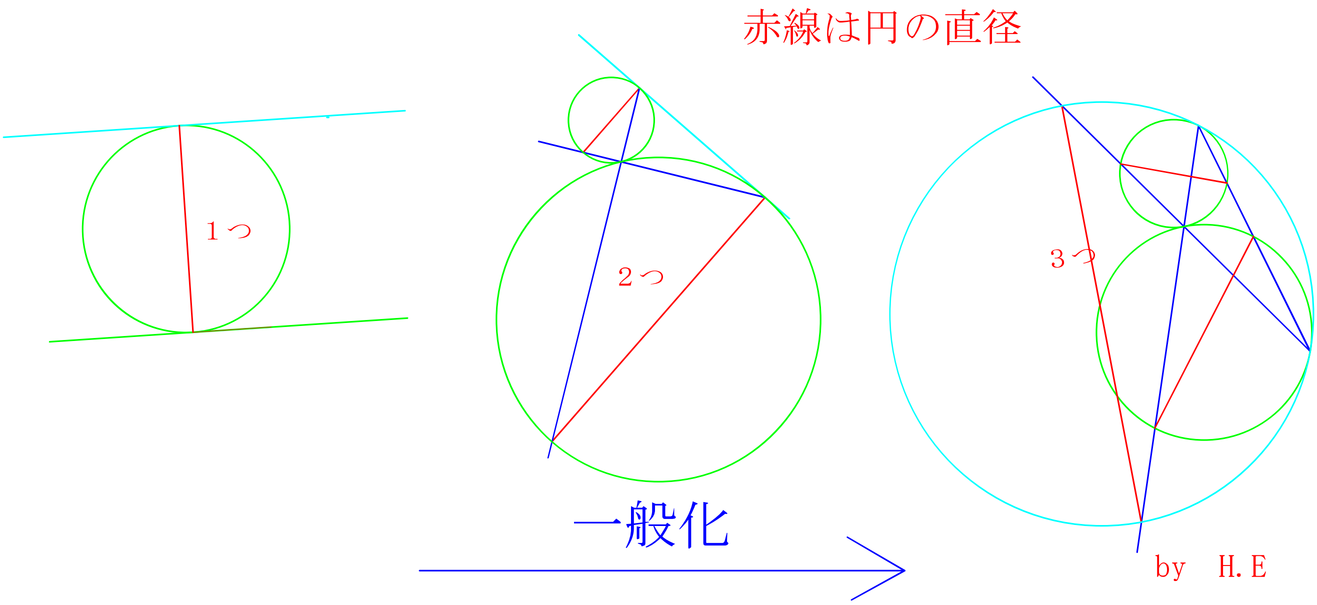
「幾何数学の小径」を作ってから、その不備を直し、「咲く今」にしていった。
はじめは、まだ geomathe という言葉が、好きだった。それで、小径の各ページの右下に,その単語が、キャプションしてあり、それは、取り除くことが、困難になった。それで、このページをまえがきしている。
あとがきのページで http://geomathe.com/は、訂正線を入れたが、「小径」の表紙と、右下に、geomathe が残った。今ここで、geomathe に変わる語を見つけて,アドレスを変えて、http://gakumon87.com/　と　http://thugaku.com/　を使うことにした。
幾何数学の小径ヘッダーも、訂正する。ページが、汚れるが、いいたいことを図ることにした。
図るも、嫌いになってきている。新語を造り、訂正したいことがあるが、思うようにいかない。文章でしか、意が通じない。図を図るより、文章化する方が、早いのでは、ないかと、今ふと思った。文章のほとんど無い、この本、生かす方法はないのか、苦悶している。咲く今も、昨今にして,いた方がよかったか、文字変換に苦労する。一つの文字で、内容が変わってしまう。言葉単語の重みをかみしめている。幾何数学とは何か、その小径を歩いてきたが、幾何数学という単語は、それに変わる、英語として、ＴＨＵＧＡＫＵがやっとできた。それを、この本に、贈るする。ＴＨＵＧＡＫＵの本であるこの本は、
幾何数学の小径の昨今を、咲く花にしていく予定である。

5 月末

蛭子井博孝

接点を結ぶと言うことにおいて

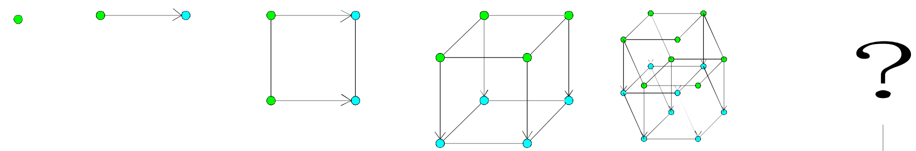
2つの緑の図形と、1つの水色の図形で、同じ構図はできるのか



次元の話（高次元立方体の構成要素の数）

ebisuihirotakaのCOMPONENT Table　パスカルの三角形の拡張　1973作成図再作成

2014-2-11



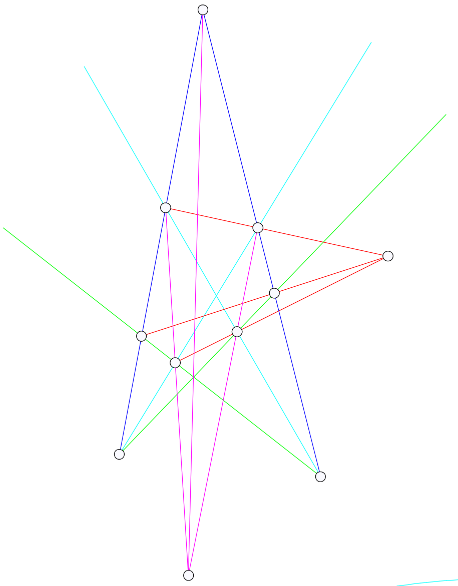
次元数	0	1	2	3	4	n
0 点の数	1	2	4	8	16	。。。
1 辺の数		1	4	12	32	
2 面の数			1	6	24	
3 立方体の数				1	8	
4 超立方体の数					1	
j。。。						${}_nC_j\,2^{n-j}$

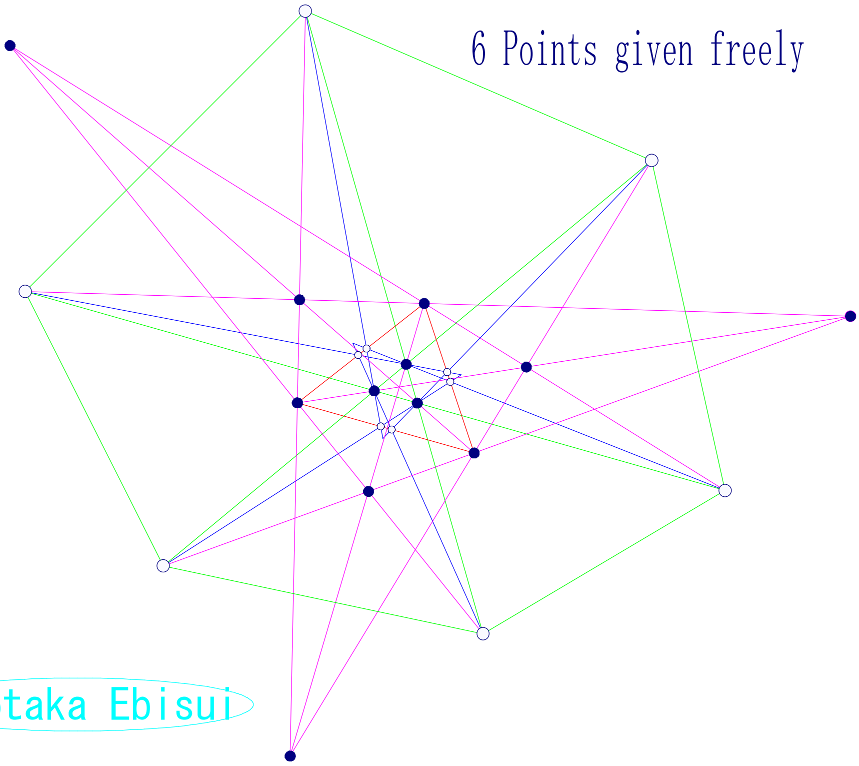
ICGG K-JH

Collinear NOTE no.9

HEXAGON THEOREM

6 Points given freely



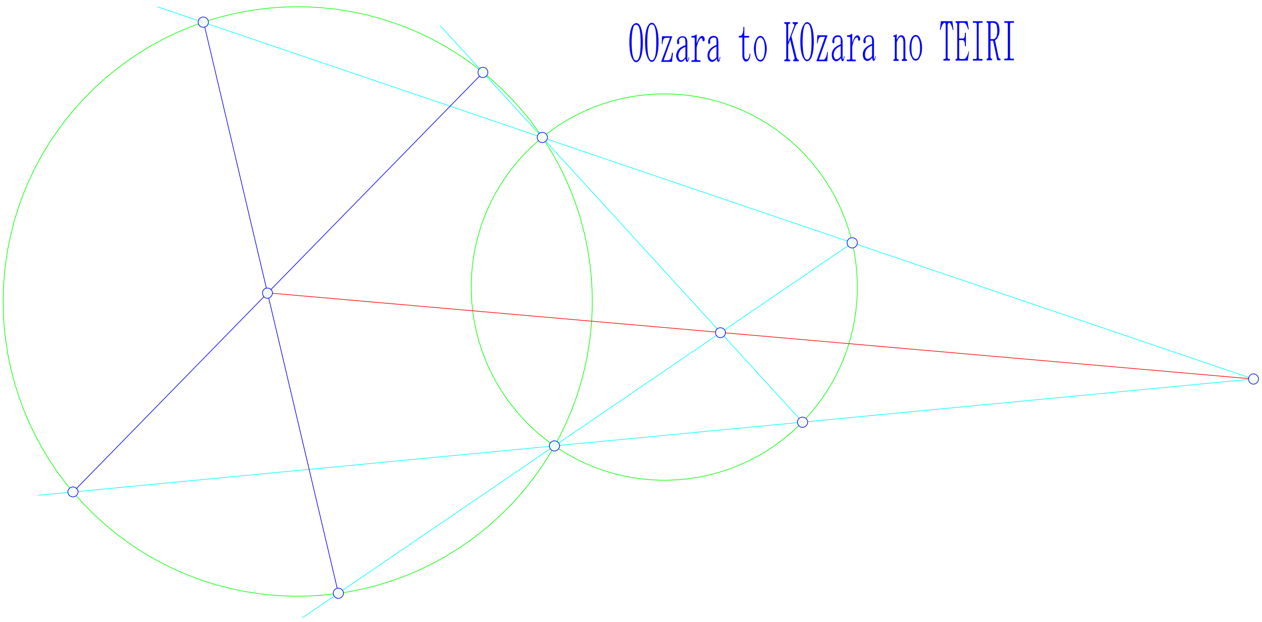


Hirotaka Ebisui

ICGG2010

Collinear NOTE (a Theorem) for Humankind 2010-7-26

OOzara to KOzara no TEIRI

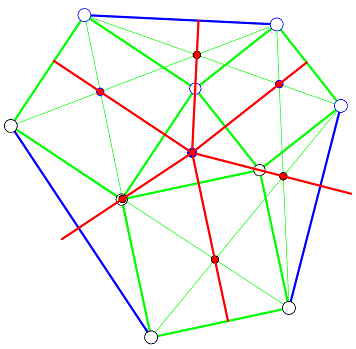


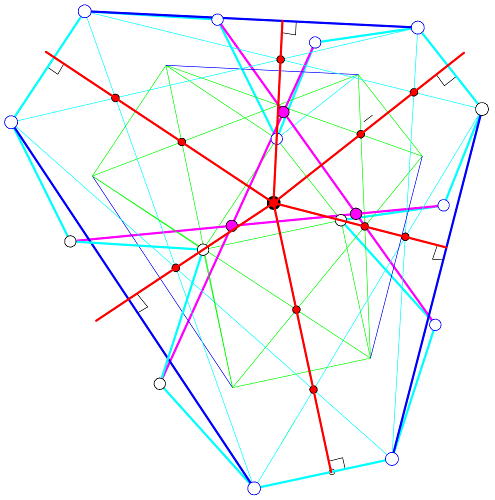
蛭子井博孝

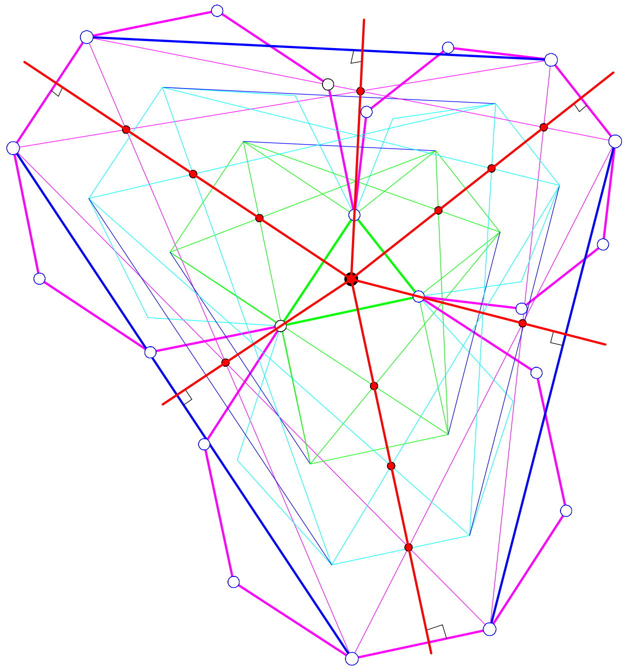
by Hirotaka Ebisui

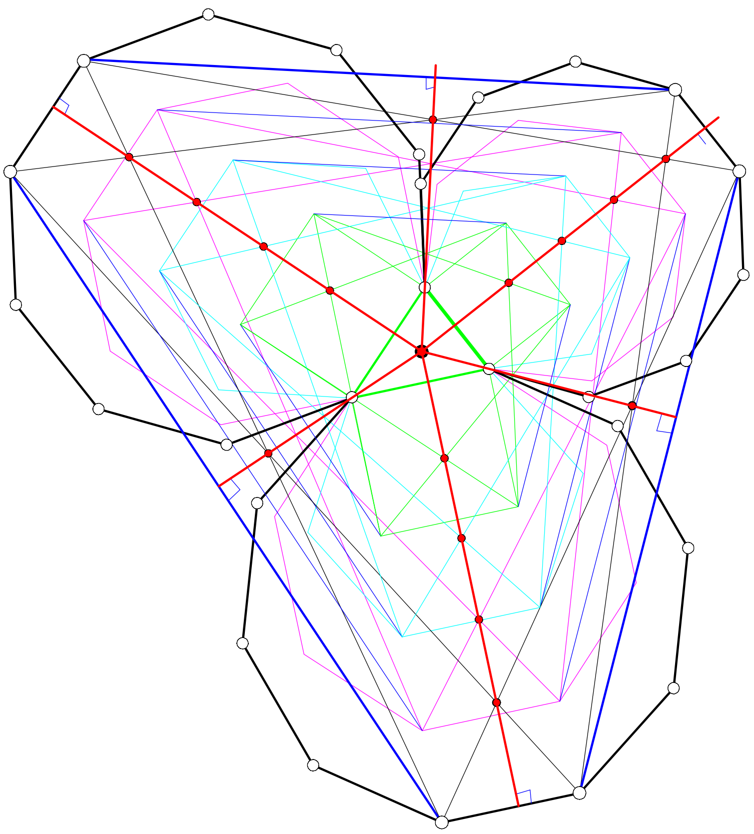
EH−T002

6垂線共点定理



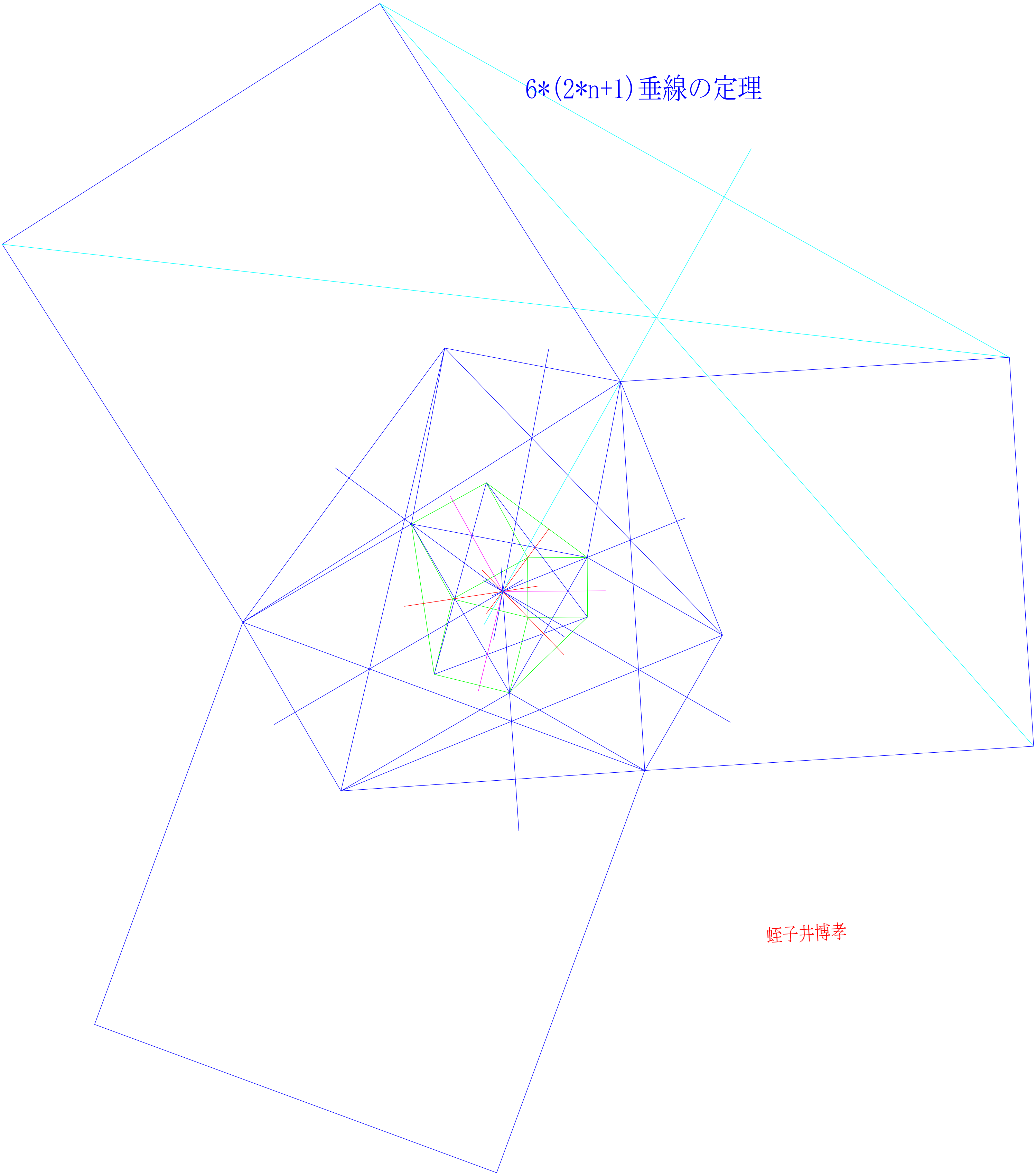






蛭子井博孝

6*(2*n+1)垂線の定理

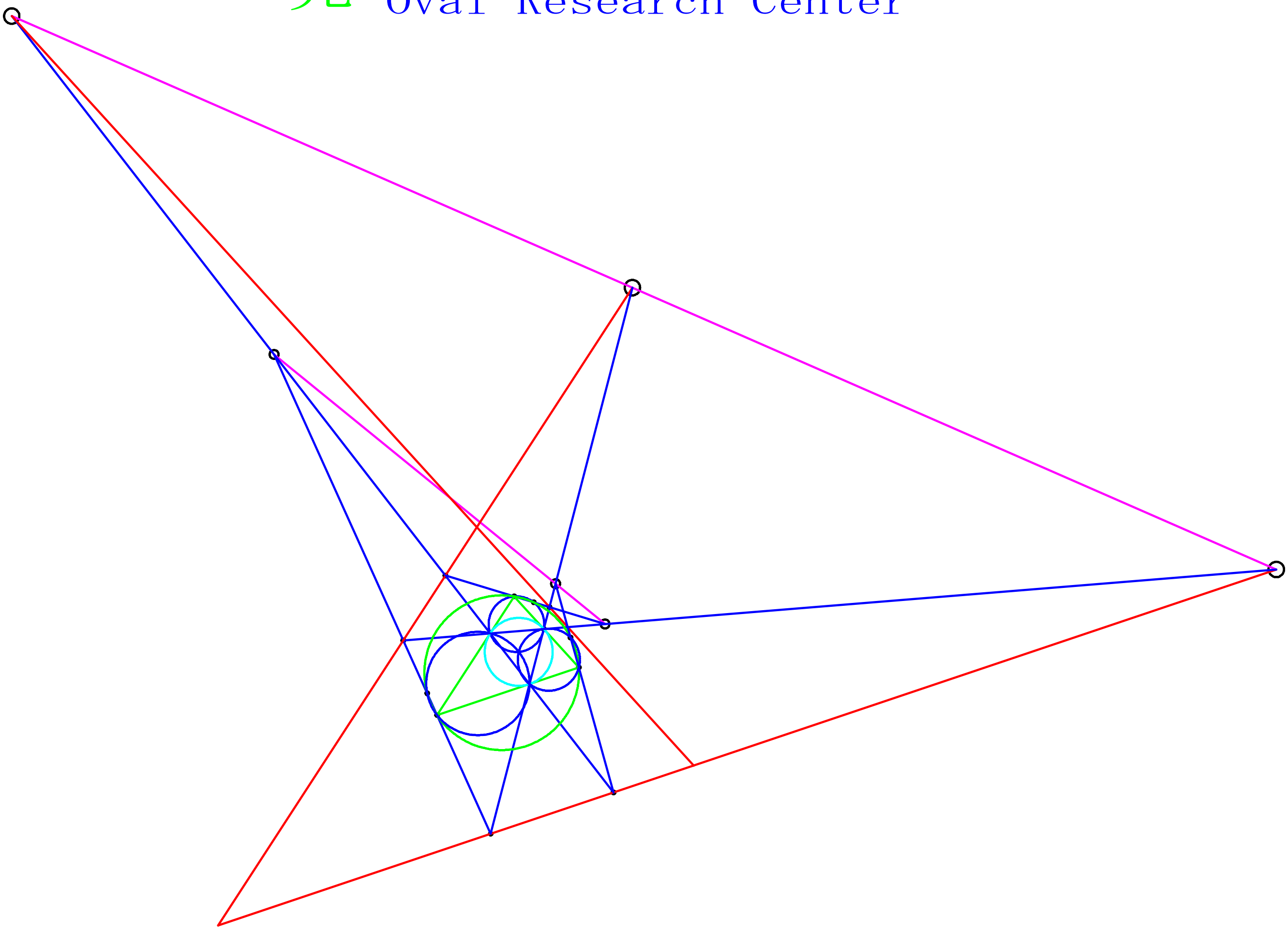


蛭子井博孝

The 14th International Conference on Geometry and Graphics at Kyoto-Univ on 2010-8/5～8/9
IN POSTER SESSION

Collinear NOTE

Hirotaka Ebisui
元 Oval Research Center



Radical Axis and Appending New Line on Collinear

Profile of Oval research Center

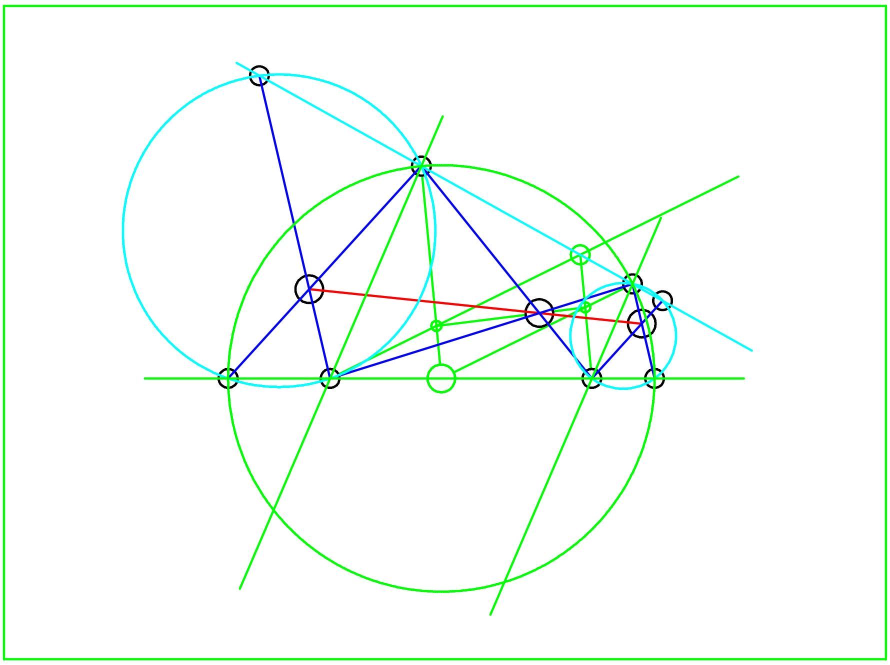
Standard Formula of Doval (Duplicated Oval)

$$(m^2-n^2)^2\left\{y^2+X^2-\frac{(k^2m^2+k^2n^2+m^2n^2)c^2}{(m^2-n^2)^2}\right\}^2=-\frac{8k^2m^2n^2c^3}{m^2-n^2}X+\frac{4k^2m^2n^2(k^2+m^2+n^2)c^4}{(m^2-n^2)^2}$$

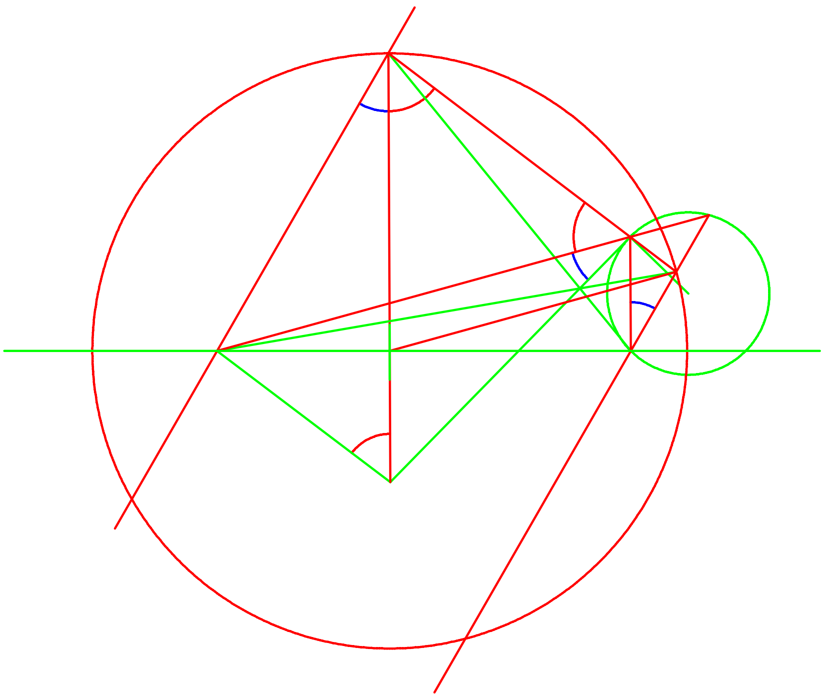
$$X=x+\frac{n^2c}{m^2-n^2}$$

Let's enjoy the steps from one point, line, circle to some Collinear Conclusions on 10 Sheets.

And memorize more then one Collinear Theorem which you like.

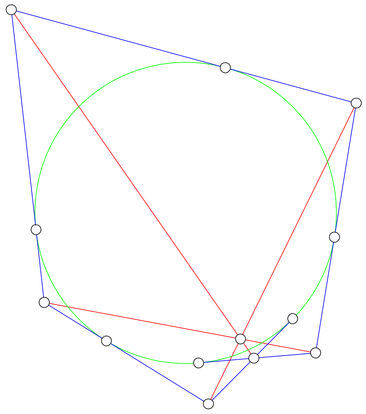


Theorem figure on drawing a tangent line on Oval

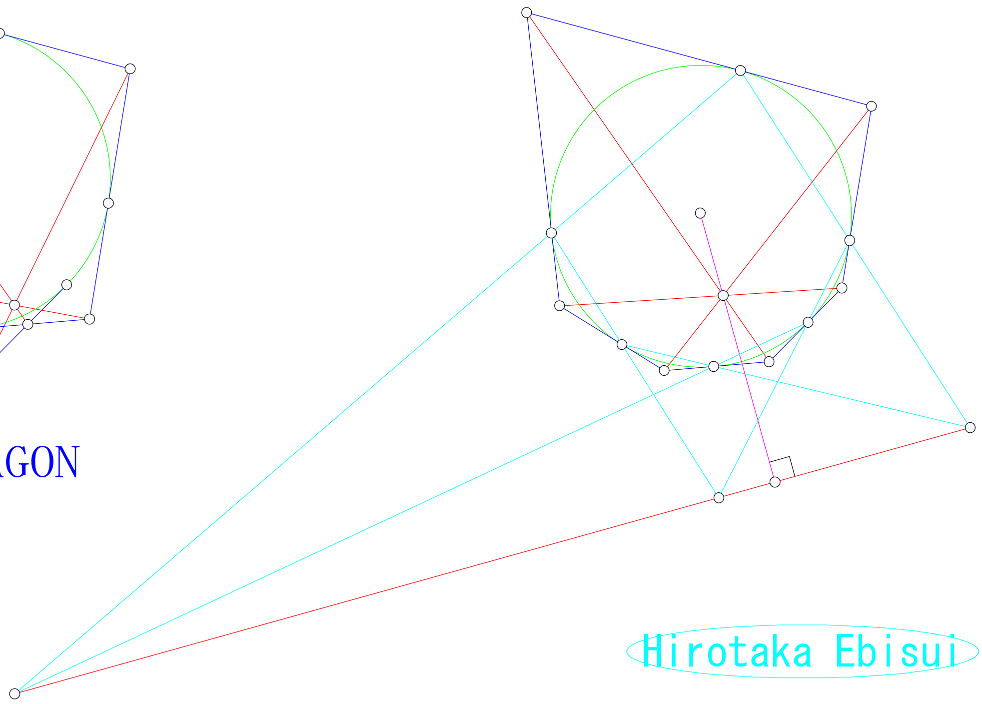


Collinear NOTE no. 3

ICGG K-JH



凹　HEXAGON



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Collinear NOTE no. 4

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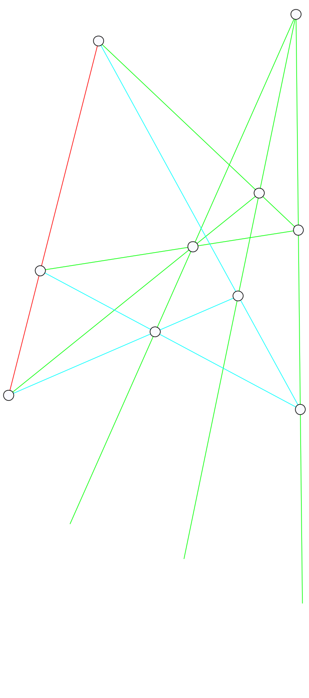

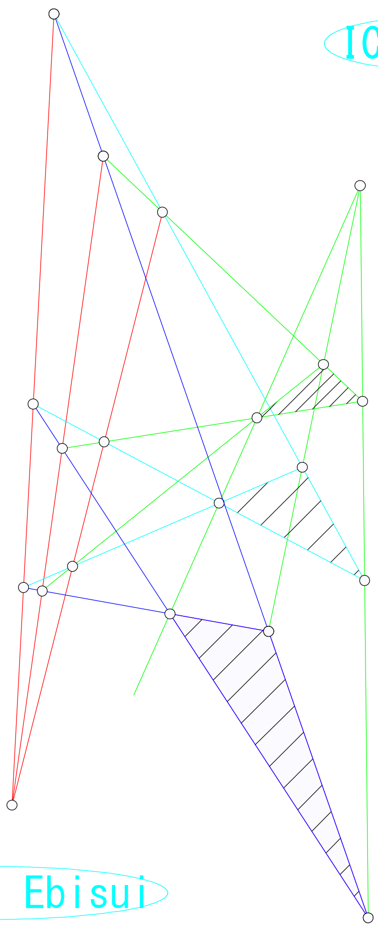

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Collinear NOTE no.5

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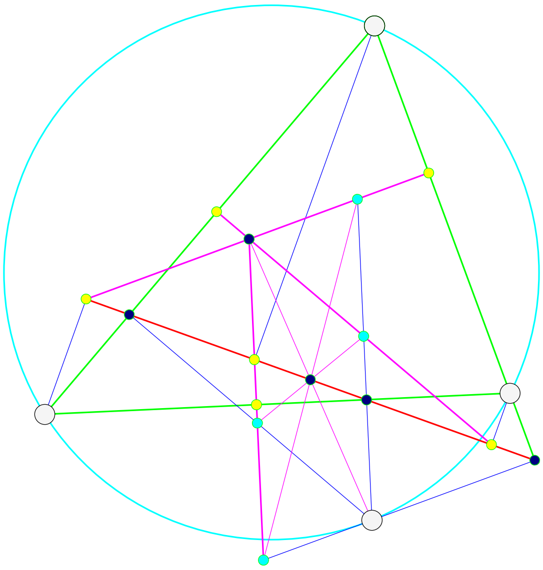

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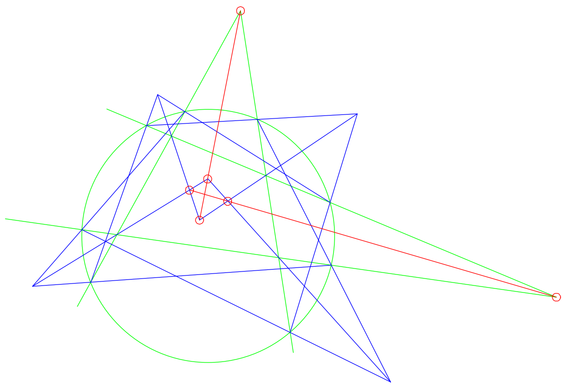

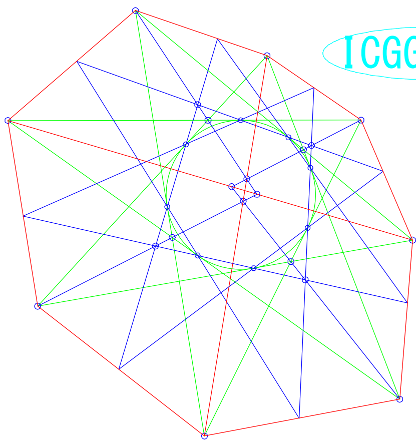

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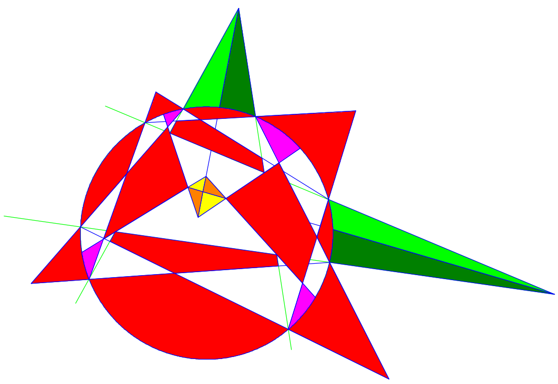
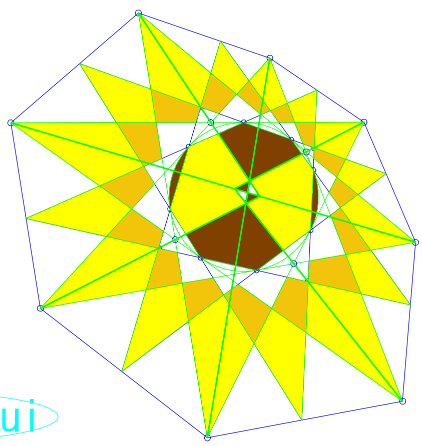
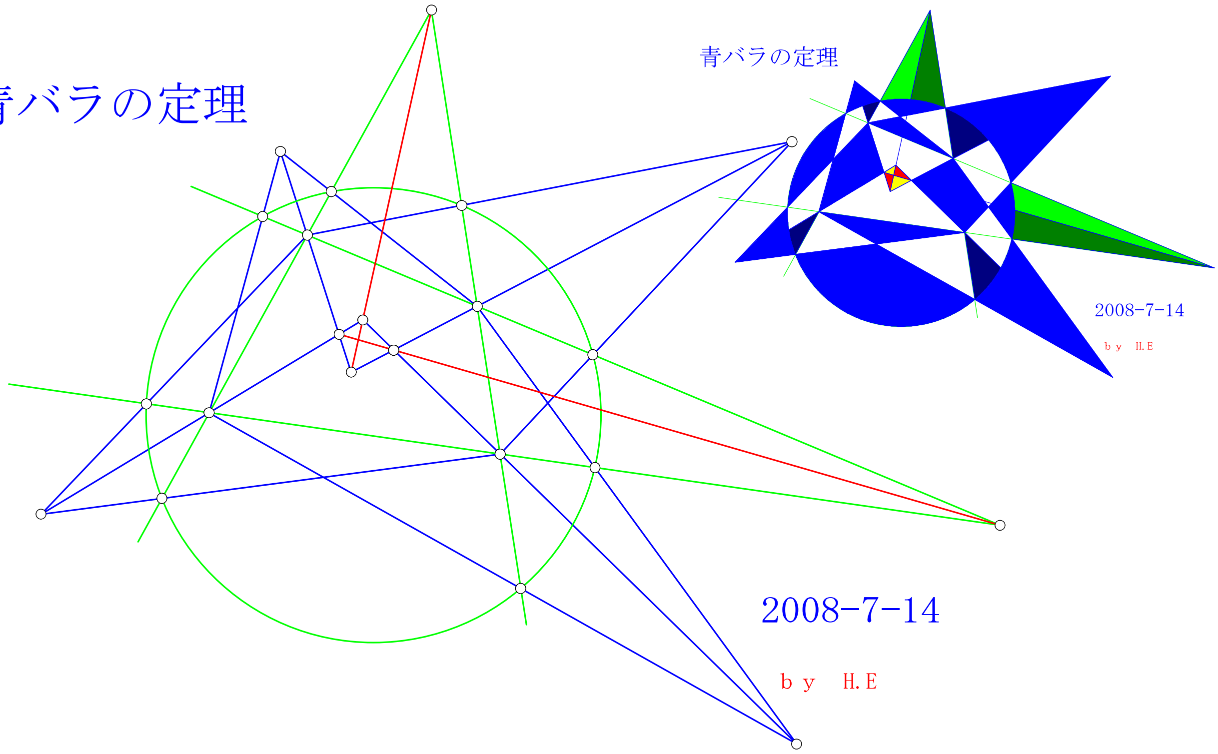
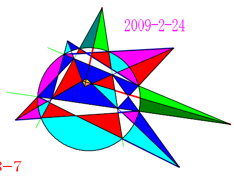




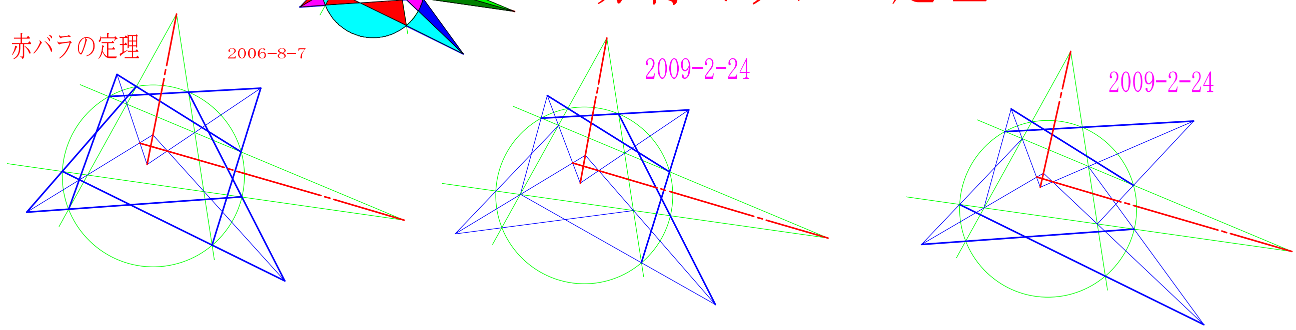
Hirotaka Ebisui

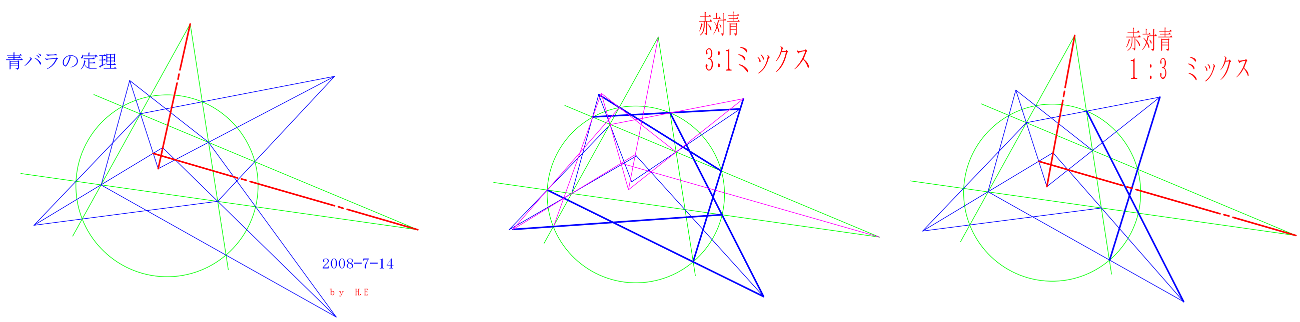
青バラの定理





赤青ミックス定理





共点共線共円定理の数表化について

蛭子井　博孝 *Hirotaka EBISUI*

概要:共線共点定理は数多くあり、幾何数学の基本的な命題として、古くから研究され、人の名や、本質の性質を表す名がついてきた。だがそれだけでは、定理の構成造は、明らかでない。 そこで、今回は、共線の点の数や、共点の線の数を用いて共線共点定理図を分析し、数表化してみて、その違いや複雑さを考察した。これにより、定理が新種かどうかも、わかり、分類項目も、見つかるだろう。

キーワード　：平面幾何学　／共点共線共円定理／共点共線共円分析／バラの定理

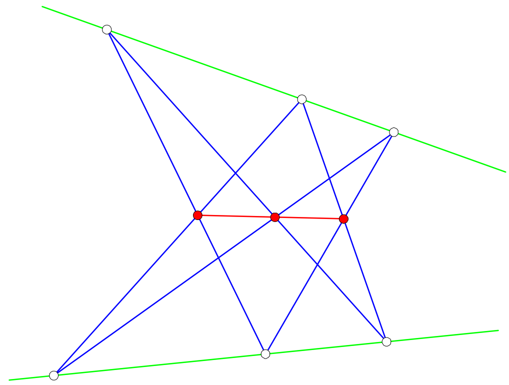
1．はじめに

三角形の重心垂心に見られる 3 線が共点である定理や、パップスやパスカルに見られる共線定理などは、古典幾何学において、重要な位置を占めている。さらに、シュタイナーや、シムソンの定理など、射影幾何学、ユークリッド幾何学において、興味ある定理が発見されている。これらは、その証明問題としての価値ばかりでなく、その構造性に、単純性や、簡潔性があるものである。蛭子井発見の共点共線定理は、参考文献[1]～[8]にもあるが、今回　新しく見つけたものとバラの定理に関して、交点の数表化である共点共線共円分析を試みた。一点を何本の線が通るか、そんな点が何個あるか、一線上に、何点あるか、そんな線が何本あるか等を表にした。その点、線の並びと構成を表で確かめてもらいたい。

2. 歴史上の定理の共点共線共円分析

はじめにで述べた 4 つの既存の定理の共点共線共円分析を行った。共点共線共円分析表のつくりかたは、図と表が、実際に、合っていることを、図表 1～図表 4 で確かめてもらいたい。

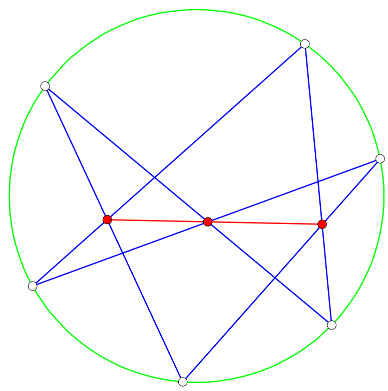
2,1　パップスの定理の共点共線（共円）分析



共点線数	点の数	累計	共線点数	線の数	累計
3	9	27	3	9	27

図表 2−1　1:1 型　1 共線　タイプ

2.2　パスカルの定理の共点共線共円分析

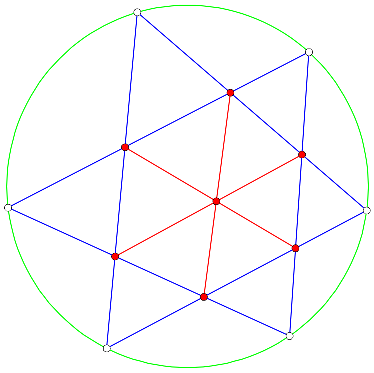


共点円数	共点線数	点の数	累計
1	2	6	18
	3	3	27
共円点数	共線点数	円(線)の数	累計
6		1	6
	3	(7)	27

図表 2−2　2:2 型 1 共線　タイプ

＊図表 1 を図表 2,3,4 では縦に 2 段にしている。同じ構造の上の 2 定理が、2 直線を円に置き換えたけで、表が複雑になっていることがわかる

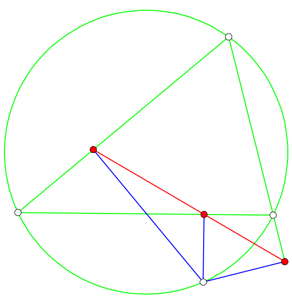
2.3 シュタイナーの定理の共点共線共円分析



共点線数	共点円数	点の数	累計
2	1	6	18
3		7	39
共円点数	共線点数	円(線)の数	累計
6		1	6
	4	(6)	30
	3	(3)	39

図表 2-3 2:3 型 1 共点 タイプ

2.4 シムソンの定理の共点共線共円分析



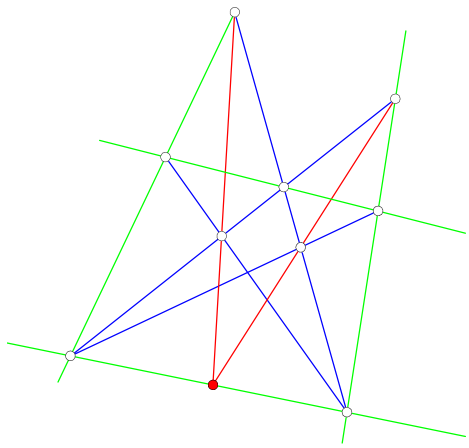
共点円数	共点線数	点の数	累計
1	2	3	9
1	3	1	13
	3	3	22

共円点数	共線点数	円(線)の数	累計
4		1	4
	3	(4)	16
	2	(3)	22

図表 2-4 3:3 型 1 共線 タイプ

3. 新定理の共点共線(共円)分析

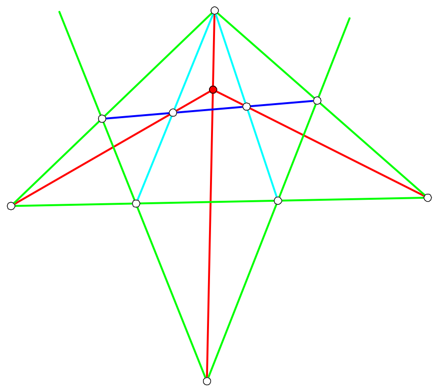
3.1 4 辺系辺上共点定理



共点線数	点の数	累計	共線点数	線の数	累計
4	2	8	4	2	8
3	8	32	3	8	32

図表 3-1 2:2 型 1 共点 タイプ

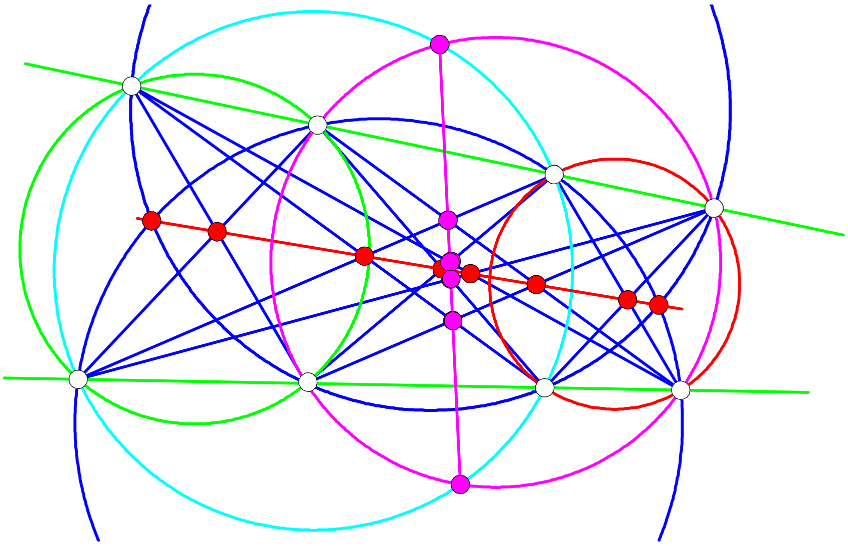
3.2 五角形翼の定理



共点線数	点の数	累計	共線点数	線の数	累計
5	1	5	4	2	8
3	10	35	3	9	35

図表 3−2 2:2 型 1 共点 タイプ

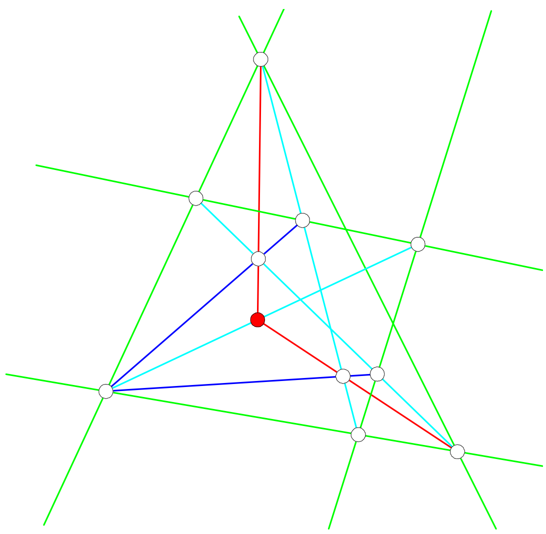
3.3 共線と共円の定理



共点円数	共点線数	点の数	累計	共円点数	共線点数	円(線)の数	累計
3	4	8	56	6		4	24
2	1	4	68	4		2	32
	3	10	98		8	(1)	40
					6	(1)	46
					4	(10)	86
					3	(4)	98

図表 3-3 3:6 型 2 共線 2 共円 タイプ

3.4 4+1 線の共点の定理



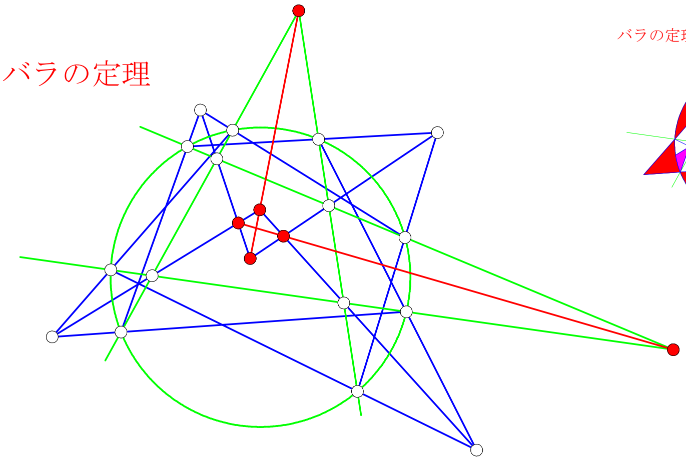
共点線数	点の数	累計	共線点数	線の数	累計
5	1	5	4	2	8
4	2	13	3	9	35
3	8	37	2	1	37

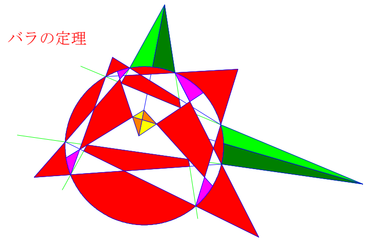
図表 3-4 3:3 型 1 共点 タイプ

*3 節では、近作の定理について、共点共線共円分析を行った. 各定理の累計が一致し、点作図(ぽち)の付方が正しいことがわかった. これで、定理図として使えるだろう。

4 バラの定理数種の分析

4. 1 赤バラの定理

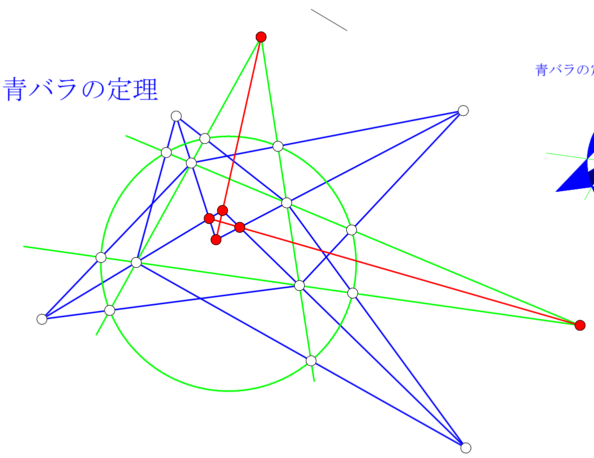


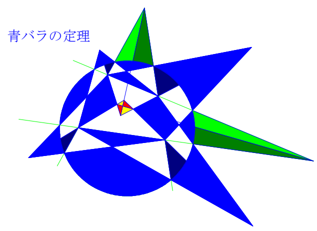


共点円数	共点線数	点の数	累計	共円点数	共線点数	円(線)の数	累計
1	3	8	32	8		1	8
	3	14	74		5	(4)	28
					4	(4)	44
					3	(10)	74

図表 4-1　　2:4 型　2 共線　タイプ

4.2 青バラの定理

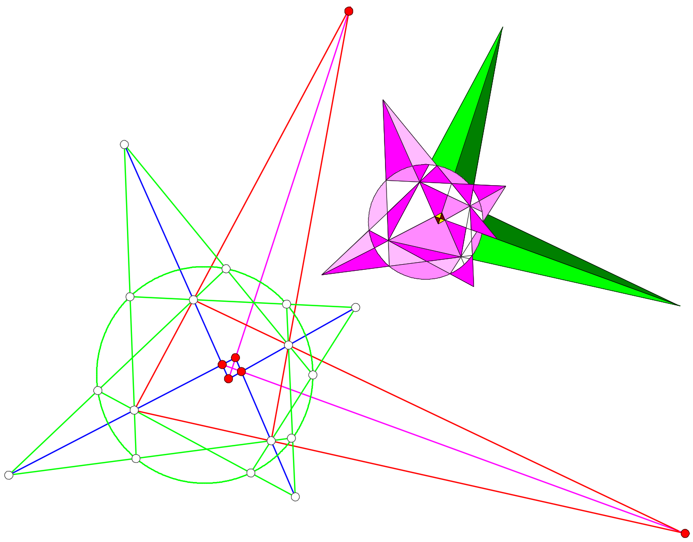




共点円数	共点線数	点の数	累計	共円点数	共線点数	円(線)の数	累計
1	2	8	24	8		1	8
	3	10	54		5	(4)	28
	5	4	74		4	(4)	44
					3	(10)	74

図表 4-2　3:4 型　2共線　タイプ

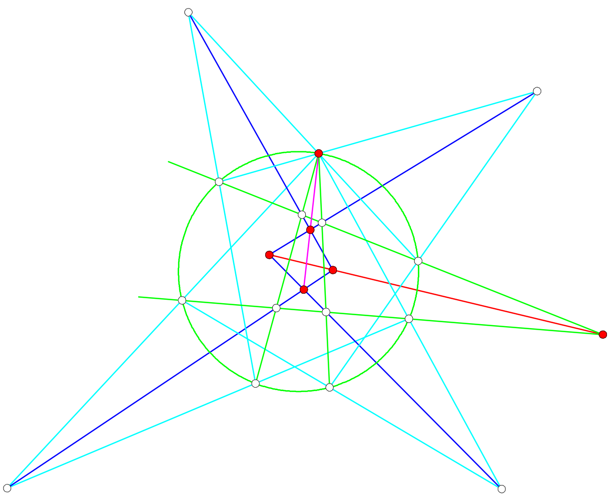
4.3 ピンクバラの定理



共点円数	共点線数	点の数	累計	共円点数	共線点数	円(線)の数	累計
1	2	8	24	8		1	8
	5	4	44		4	(12)	56
	3	10	74		3	(6)	74

図表 4-3　3:3 型 2 共線　タイプ

4.4　7 点バラの定理



共点円数	共点線数	点の数	累計	共円点数	共線点数	円(線)の数	累計
1	3	6	24	7		1	7
1	7	1	32		5	(2)	17
	3	13	71		4	(6)	41
					3	(10)	71

図表 4-4　3:4 型　2 共線　タイプ

＊4節で、バラの定理のはじめの３つが、累合計数、74の定理であることが、わかった。つまり、累合計数は、定理固有のものかもしれない。7点バラは、円周交点8が7に縮退しているので、累計が71だろう。

5. 結び

点や線と円の数を共点、共線で数え、数表化した。その表は、定理の図表キャプションのような数による特徴付けといえる。単純な図形ほど数表も単純である、パップス、パスカルや、バラの定理のように同種の物は、累計が、一致していた。とにかく、分析表をもっと多様に集めるといろいろなことが言えるだろう。今回は、定理の読図とは、別に、構成造を数値によって楽しむことができた。まだ、明確な、性質を絞り出すには至っていない。図表1-1～図表4-4は、定理の固有性を持つものといっても過言ではない。分析表は、今のところ、定理の複雑さを大雑把に見る１指標で，図に、数表を付加させた、定理の別表現でもある。

本論では、表16を定理図に付加したが、共点共線定理のほとんどの場合をカバーしているのではなかろうか。それで、これらの図表の共点共線共円分析が平面幾何学の定理とは、何か、を考察する，ユークリッド、射影幾何、非ユークリッド，微分幾何という、これまでの幾何学とは、別の観点からの手がかりになるのではなかろうか。

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[3] 蛭子井博孝，“　射影変換で不変な一共点定理”、図学研究, 77号（1997）.

[4] 蛭子井博孝，“　共点共線定理の円表現”、1998年大会学術講演論文集、日本図学会

[5] 蛭子井博孝,“　続射影変換で不変な一共点定理（円表現）”，　図学研究、81号、（1998）

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[8] Hirotaka Ebisui ;“COLLINEAR NOTE”, ICGG2010、ポスターセッション、京大、(2010)

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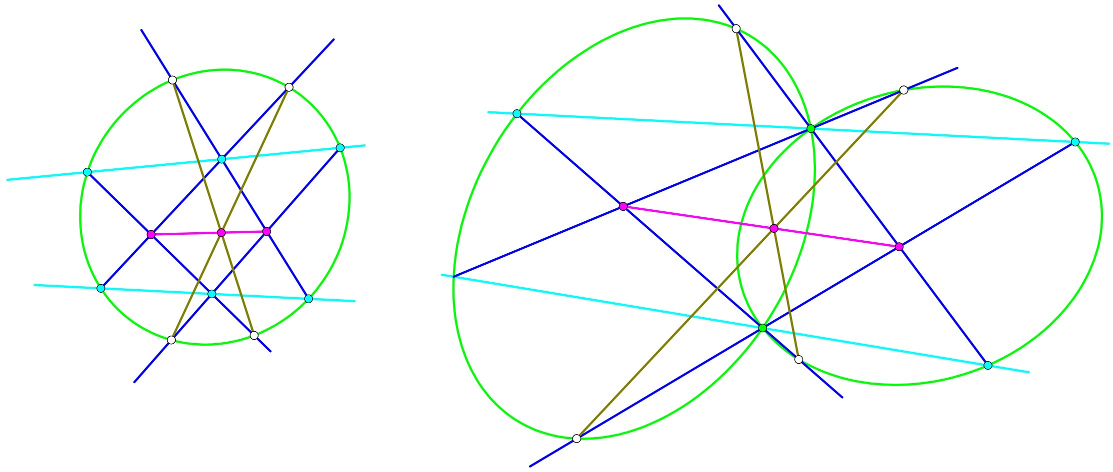
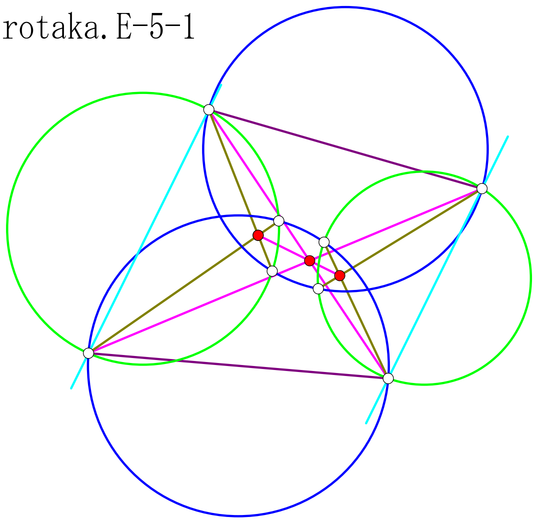
2016-7-17

2円系H.E5題

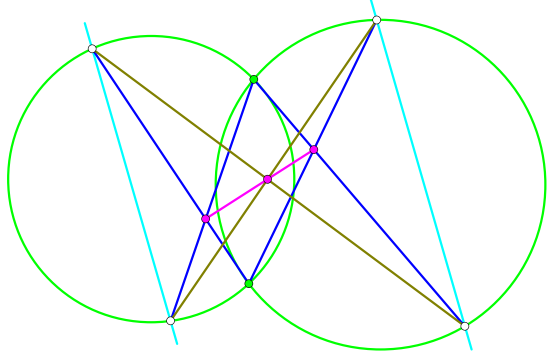
Hirotaka.E-5-5



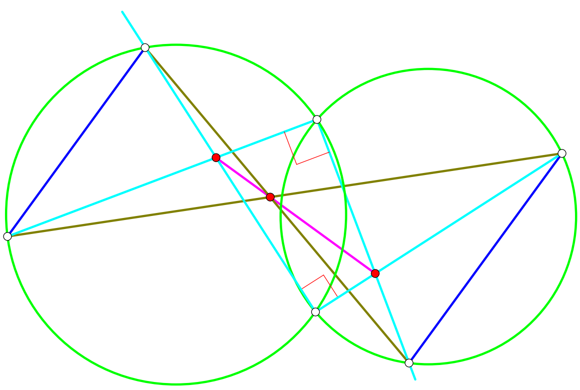
Hirotaka.E-5-1



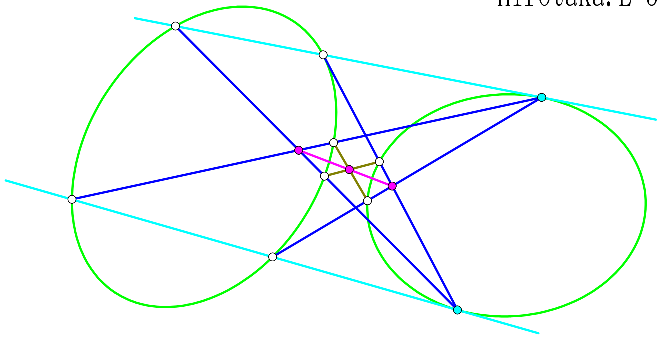
Hirotaka.E-5-2



Hirotaka.E-5-3

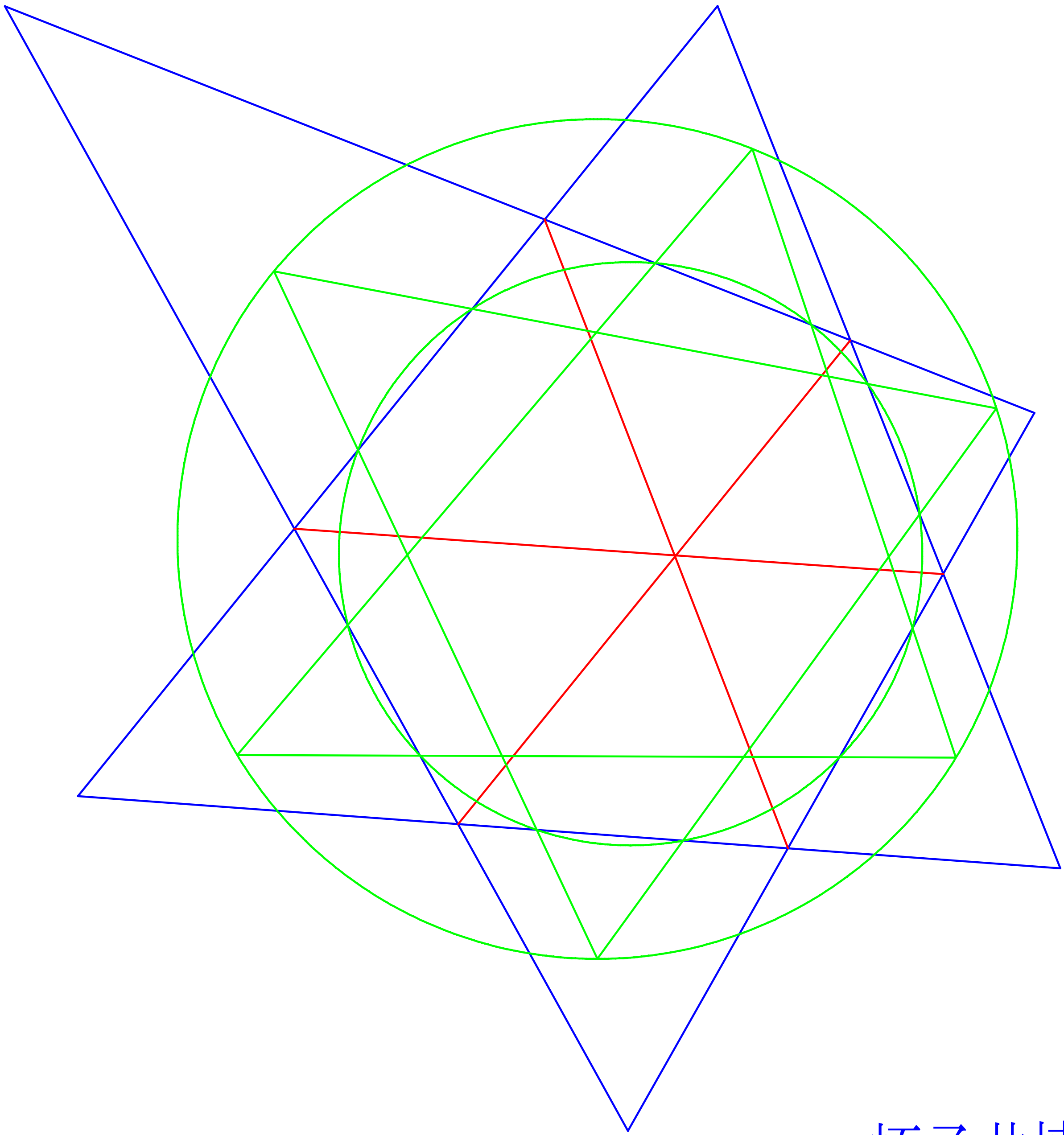


Hirotaka.E-5-4



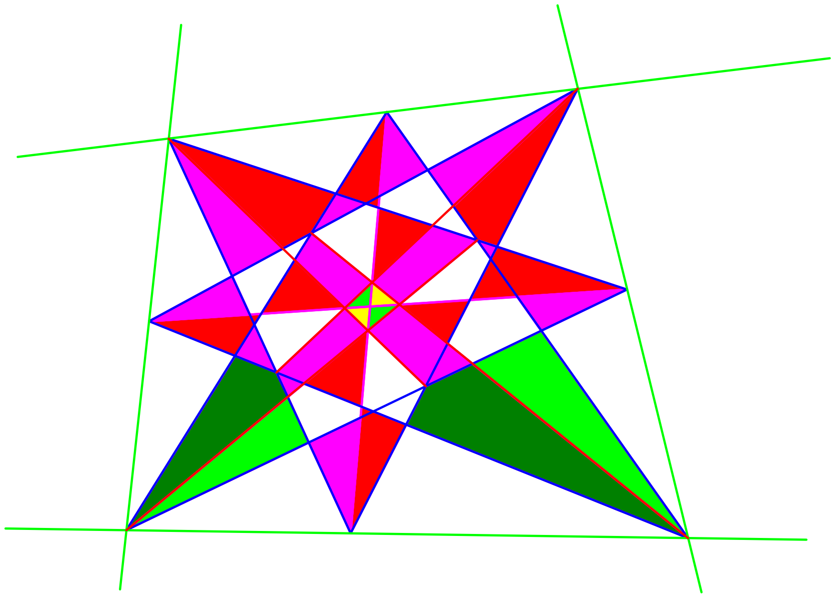
蛭子井博孝

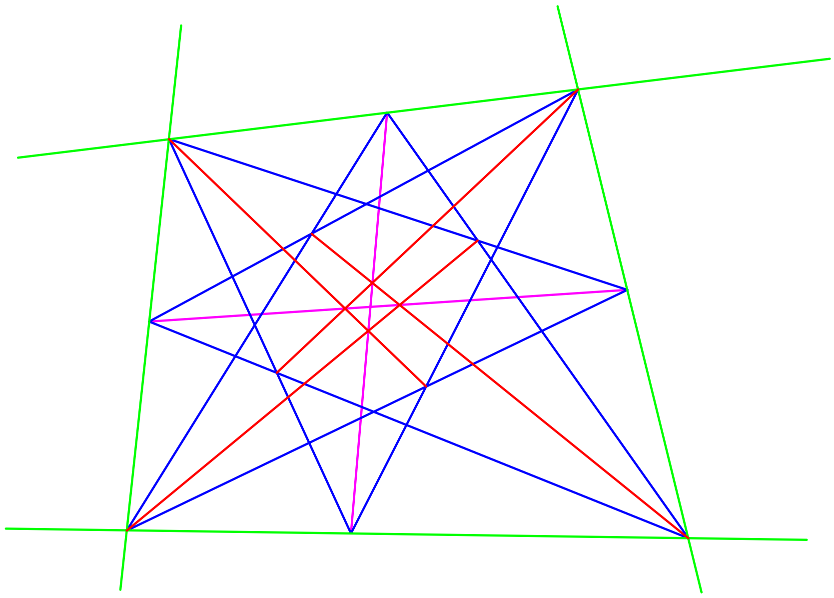
2円星々の定理



蛭子井博孝

4辺系の花の定理





蛭子井博孝

2017-6-2

緑井富士フードコーナーにて

> *# HI-NUM-008 Bithday Prime Check Table by H.E:*

>

> *with*(*StringTools*) : *FormatTime*("%Y-%m-%d(%r)");

"2018-05-17(01:26:31 AM)" **(1)**

> *print*(*Birthday "1918年1月1日1時 prime"* = *isprime*(16567 + 2 + 2 + 2));

Birthday "1918年1月1日1時 prime" = *true* **(2)**

> *ithprime*(1956); *ithprime*(7); *ithprime*(3);

16963

17

5 **(3)**

> **for** *b* **from** 1 **to** 201 **do** *YP*‖*b* := *ithprime*(1917 + *b*)[(1917 + *b*)[年]] : *mp*‖*b* := *ithprime*(*b*)[*b*[月]] : *dp*‖*b* := *ithprime*(*b*)[*b*[日]] : *tp*‖*b* := *ithprime*(*b*)[*b*[時]] :**od**:
for *x* **from** 1 **to** 201 **do** *print*(*Prime* = [*YP*‖*x*, *mp*‖*x*, *dp*‖*x*, *tp*‖*x*]) :**od**:
FormatTime("%Y-%m-%d(%r)");
#1956年7月3日16963 +17 +5=16985?　年の欄にあるか なしか:

$$Prime = [16567_{1918_{年}}, 2_{1_{月}}, 2_{1_{日}}, 2_{1_{時}}]$$

$$Prime = [16573_{1919_{年}}, 3_{2_{月}}, 3_{2_{日}}, 3_{2_{時}}]$$

$$Prime = [16603_{1920_{年}}, 5_{3_{月}}, 5_{3_{日}}, 5_{3_{時}}]$$

$$Prime = [16607_{1921_{年}}, 7_{4_{月}}, 7_{4_{日}}, 7_{4_{時}}]$$

$$Prime = [16619_{1922_{年}}, 11_{5_{月}}, 11_{5_{日}}, 11_{5_{時}}]$$

$$Prime = [16631_{1923_{年}}, 13_{6_{月}}, 13_{6_{日}}, 13_{6_{時}}]$$

$$Prime = [16633_{1924_{年}}, 17_{7_{月}}, 17_{7_{日}}, 17_{7_{時}}]$$

$$Prime = [16649_{1925_{年}}, 19_{8_{月}}, 19_{8_{日}}, 19_{8_{時}}]$$

$$Prime = [16651_{1926_{年}}, 23_{9_{月}}, 23_{9_{日}}, 23_{9_{時}}]$$

$$Prime = [16657_{1927_{年}}, 29_{10_{月}}, 29_{10_{日}}, 29_{10_{時}}]$$

$$Prime = [16661_{1928_{年}}, 31_{11_{月}}, 31_{11_{日}}, 31_{11_{時}}]$$

$$Prime = [16673_{1929_{年}}, 37_{12_{月}}, 37_{12_{日}}, 37_{12_{時}}]$$

$$Prime = [16691_{1930_{年}}, 41_{13_{月}}, 41_{13_{日}}, 41_{13_{時}}]$$

$$Prime = [16693_{1931_{年}}, 43_{14_{月}}, 43_{14_{日}}, 43_{14_{時}}]$$

$$Prime = [16699_{1932_{年}}, 47_{15_{月}}, 47_{15_{日}}, 47_{15_{時}}]$$

$$Prime = [16703_{1933_{年}}, 53_{16_{月}}, 53_{16_{日}}, 53_{16_{時}}]$$

$$Prime = [16729_{1934_{年}}, 59_{17_{月}}, 59_{17_{日}}, 59_{17_{時}}]$$

$$Prime = [16741_{1935_{年}}, 61_{18_{月}}, 61_{18_{日}}, 61_{18_{時}}]$$

$$Prime = [16747_{1936_{年}}, 67_{19_{月}}, 67_{19_{日}}, 67_{19_{時}}]$$

$$Prime = [16759_{1937_{年}}, 71_{20_{月}}, 71_{20_{日}}, 71_{20_{時}}]$$

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$$Prime = \left[16871_{1945_{年}}, 107_{28_{月}}, 107_{28_{日}}, 107_{28_{時}}\right]$$
$$Prime = \left[16879_{1946_{年}}, 109_{29_{月}}, 109_{29_{日}}, 109_{29_{時}}\right]$$
$$Prime = \left[16883_{1947_{年}}, 113_{30_{月}}, 113_{30_{日}}, 113_{30_{時}}\right]$$
$$Prime = \left[16889_{1948_{年}}, 127_{31_{月}}, 127_{31_{日}}, 127_{31_{時}}\right]$$
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$$Prime = \left[16981_{1958_{年}}, 179_{41_{月}}, 179_{41_{日}}, 179_{41_{時}}\right]$$
$$Prime = \left[16987_{1959_{年}}, 181_{42_{月}}, 181_{42_{日}}, 181_{42_{時}}\right]$$
$$Prime = \left[16993_{1960_{年}}, 191_{43_{月}}, 191_{43_{日}}, 191_{43_{時}}\right]$$
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$$Prime = \left[17021_{1962_{年}}, 197_{45_{月}}, 197_{45_{日}}, 197_{45_{時}}\right]$$
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$$Prime = \left[17047_{1967_{年}}, 229_{50_{月}}, 229_{50_{日}}, 229_{50_{時}}\right]$$
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$$Prime = \left[17077_{1969_{年}}, 239_{52_{月}}, 239_{52_{日}}, 239_{52_{時}}\right]$$
$$Prime = \left[17093_{1970_{年}}, 241_{53_{月}}, 241_{53_{日}}, 241_{53_{時}}\right]$$
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$$Prime = \left[17107_{1972_{年}}, 257_{55_{月}}, 257_{55_{日}}, 257_{55_{時}}\right]$$
$$Prime = \left[17117_{1973_{年}}, 263_{56_{月}}, 263_{56_{日}}, 263_{56_{時}}\right]$$
$$Prime = \left[17123_{1974_{年}}, 269_{57_{月}}, 269_{57_{日}}, 269_{57_{時}}\right]$$
$$Prime = \left[17137_{1975_{年}}, 271_{58_{月}}, 271_{58_{日}}, 271_{58_{時}}\right]$$
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$$Prime = \left[17191_{1980_{年}}, 307_{63_{月}}, 307_{63_{日}}, 307_{63_{時}}\right]$$
$$Prime = \left[17203_{1981_{年}}, 311_{64_{月}}, 311_{64_{日}}, 311_{64_{時}}\right]$$
$$Prime = \left[17207_{1982_{年}}, 313_{65_{月}}, 313_{65_{日}}, 313_{65_{時}}\right]$$
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$$Prime = \left[17231_{1984_{年}}, 331_{67_{月}}, 331_{67_{日}}, 331_{67_{時}}\right]$$
$$Prime = \left[17239_{1985_{年}}, 337_{68_{月}}, 337_{68_{日}}, 337_{68_{時}}\right]$$
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$$Prime = \left[17359_{1996_{年}}, 401_{79_{月}}, 401_{79_{日}}, 401_{79_{時}}\right]$$
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$$Prime = \left[17401_{2002_{年}}, 439_{85_{月}}, 439_{85_{日}}, 439_{85_{時}}\right]$$
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$$Prime = \left[17827_{2044_{年}}, 709_{127_{月}}, 709_{127_{日}}, 709_{127_{時}}\right]$$
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$$Prime = \left[17881_{2049_{年}}, 743_{132_{月}}, 743_{132_{日}}, 743_{132_{時}}\right]$$
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$Prime = \left[18061_{2071_{\text{年}}}, 887_{154_{\text{月}}}, 887_{154_{\text{日}}}, 887_{154_{\text{時}}}\right]$

$Prime = \left[18077_{2072_{\text{年}}}, 907_{155_{\text{月}}}, 907_{155_{\text{日}}}, 907_{155_{\text{時}}}\right]$

$Prime = \left[18089_{2073_{\text{年}}}, 911_{156_{\text{月}}}, 911_{156_{\text{日}}}, 911_{156_{\text{時}}}\right]$

$Prime = \left[18097_{2074_{\text{年}}}, 919_{157_{\text{月}}}, 919_{157_{\text{日}}}, 919_{157_{\text{時}}}\right]$

$Prime = \left[18119_{2075_{\text{年}}}, 929_{158_{\text{月}}}, 929_{158_{\text{日}}}, 929_{158_{\text{時}}}\right]$

$Prime = \left[18121_{2076_{\text{年}}}, 937_{159_{\text{月}}}, 937_{159_{\text{日}}}, 937_{159_{\text{時}}}\right]$

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$Prime = \left[18143_{2080_{\text{年}}}, 967_{163_{\text{月}}}, 967_{163_{\text{日}}}, 967_{163_{\text{時}}}\right]$

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$Prime = \left[18169_{2082_{\text{年}}}, 977_{165_{\text{月}}}, 977_{165_{\text{日}}}, 977_{165_{\text{時}}}\right]$

$$Prime = \left[18181_{2083_{\text{年}}}, 983_{166_{\text{月}}}, 983_{166_{\text{日}}}, 983_{166_{\text{時}}}\right]$$

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$$Prime = \left[18289_{2096_{\text{年}}}, 1063_{179_{\text{月}}}, 1063_{179_{\text{日}}}, 1063_{179_{\text{時}}}\right]$$

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$$Prime = \left[18307_{2098_{\text{年}}}, 1087_{181_{\text{月}}}, 1087_{181_{\text{日}}}, 1087_{181_{\text{時}}}\right]$$

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$$Prime = \left[18329_{2101_{\text{年}}}, 1097_{184_{\text{月}}}, 1097_{184_{\text{日}}}, 1097_{184_{\text{時}}}\right]$$

$$Prime = \left[18341_{2102_{\text{年}}}, 1103_{185_{\text{月}}}, 1103_{185_{\text{日}}}, 1103_{185_{\text{時}}}\right]$$

$$Prime = \left[18353_{2103_{\text{年}}}, 1109_{186_{\text{月}}}, 1109_{186_{\text{日}}}, 1109_{186_{\text{時}}}\right]$$

$$Prime = \left[18367_{2104_{\text{年}}}, 1117_{187_{\text{月}}}, 1117_{187_{\text{日}}}, 1117_{187_{\text{時}}}\right]$$

$$Prime = \left[18371_{2105_{\text{年}}}, 1123_{188_{\text{月}}}, 1123_{188_{\text{日}}}, 1123_{188_{\text{時}}}\right]$$

$$Prime = \left[18379_{2106_{\text{年}}}, 1129_{189_{\text{月}}}, 1129_{189_{\text{日}}}, 1129_{189_{\text{時}}}\right]$$

$$Prime = \left[18397_{2107_{\text{年}}}, 1151_{190_{\text{月}}}, 1151_{190_{\text{日}}}, 1151_{190_{\text{時}}}\right]$$

$$Prime = \left[18401_{2108_{\text{年}}}, 1153_{191_{\text{月}}}, 1153_{191_{\text{日}}}, 1153_{191_{\text{時}}}\right]$$

$$Prime = \left[18413_{2109_{\text{年}}}, 1163_{192_{\text{月}}}, 1163_{192_{\text{日}}}, 1163_{192_{\text{時}}}\right]$$

$$Prime = \left[18427_{2110_{\text{年}}}, 1171_{193_{\text{月}}}, 1171_{193_{\text{日}}}, 1171_{193_{\text{時}}}\right]$$

$$Prime = \left[18433_{2111_{\text{年}}}, 1181_{194_{\text{月}}}, 1181_{194_{\text{日}}}, 1181_{194_{\text{時}}}\right]$$

$$Prime = \left[18439_{2112_{年}}, 1187_{195_{月}}, 1187_{195_{日}}, 1187_{195_{時}}\right]$$
$$Prime = \left[18443_{2113_{年}}, 1193_{196_{月}}, 1193_{196_{日}}, 1193_{196_{時}}\right]$$
$$Prime = \left[18451_{2114_{年}}, 1201_{197_{月}}, 1201_{197_{日}}, 1201_{197_{時}}\right]$$
$$Prime = \left[18457_{2115_{年}}, 1213_{198_{月}}, 1213_{198_{日}}, 1213_{198_{時}}\right]$$
$$Prime = \left[18461_{2116_{年}}, 1217_{199_{月}}, 1217_{199_{日}}, 1217_{199_{時}}\right]$$
$$Prime = \left[18481_{2117_{年}}, 1223_{200_{月}}, 1223_{200_{日}}, 1223_{200_{時}}\right]$$
$$Prime = \left[18493_{2118_{年}}, 1229_{201_{月}}, 1229_{201_{日}}, 1229_{201_{時}}\right]$$

"2018-05-17(01:42:01 AM)" **(4)**

(5)

>

>

> # First 10th T -TTTTTwin Primes by H.E.

> **for** k **from** 1 **to** 5 **do** $c\|k := 0$:**od**:**for** n **from** 1 **to** 1000000 **do** **for** h **from** 1 **to** 5 **do** $c := 0$: **for** m **from** 1 **to** $2\cdot h - 1$ **by** 2 **do if** $ithprime(n+m-1) + 2 = ithprime(n+m)$ **then** $c := c+1$:**else break fi**:**od**: **if** $c = h$ **then** $c\|h := c\|h + 1$: **if** $c\|h < 11$ **then** $print(T = h, Th = c\|h, Thn = n, [seq([ithprime(n+2\cdot(j-1)), ithprime(n+2\cdot(j-1)+1)], j = 1..h)])$:**fi**:**fi**:**od**:**od**:

$T = 1, Th = 1, Thn = 2, [[3, 5]]$

$T = 1, Th = 2, Thn = 3, [[5, 7]]$

$T = 2, Th = 1, Thn = 3, [[5, 7], [11, 13]]$

$T = 3, Th = 1, Thn = 3, [[5, 7], [11, 13], [17, 19]]$

$T = 1, Th = 3, Thn = 5, [[11, 13]]$

$T = 2, Th = 2, Thn = 5, [[11, 13], [17, 19]]$

$T = 1, Th = 4, Thn = 7, [[17, 19]]$

$T = 1, Th = 5, Thn = 10, [[29, 31]]$

$T = 1, Th = 6, Thn = 13, [[41, 43]]$

$T = 1, Th = 7, Thn = 17, [[59, 61]]$

$T = 1, Th = 8, Thn = 20, [[71, 73]]$

$T = 1, Th = 9, Thn = 26, [[101, 103]]$

$T = 2, Th = 3, Thn = 26, [[101, 103], [107, 109]]$

$T = 1, Th = 10, Thn = 28, [[107, 109]]$

$T = 2, Th = 4, Thn = 33, [[137, 139], [149, 151]]$

$T = 2, Th = 5, Thn = 41, [[179, 181], [191, 193]]$

$T = 3, Th = 2, Thn = 41, [[179, 181], [191, 193], [197, 199]]$

$T = 2, Th = 6, Thn = 43, [[191, 193], [197, 199]]$

$T = 2, Th = 7, Thn = 81, [[419, 421], [431, 433]]$

$T = 2, Th = 8, Thn = 140, [[809, 811], [821, 823]]$

$T = 3, Th = 3, Thn = 140, [[809, 811], [821, 823], [827, 829]]$

$T = 2, Th = 9, Thn = 142, [[821, 823], [827, 829]]$

$T = 2, Th = 10, Thn = 171, [[1019, 1021], [1031, 1033]]$

$T = 3, Th = 4, Thn = 473, [[3359, 3361], [3371, 3373], [3389, 3391]]$

$T = 3, Th = 5, Thn = 577, [[4217, 4219], [4229, 4231], [4241, 4243]]$

$T = 3, Th = 6, Thn = 870, [[6761, 6763], [6779, 6781], [6791, 6793]]$

$T = 3, Th = 7, Thn = 1165, [[9419, 9421], [9431, 9433], [9437, 9439]]$

$T = 4, Th = 1, Thn = 1165, [[9419, 9421], [9431, 9433], [9437, 9439], [9461, 9463]]$

$T = 3, Th = 8, Thn = 1167, [[9431, 9433], [9437, 9439], [9461, 9463]]$

$T = 3, Th = 9, Thn = 2066, [[18041, 18043], [18047, 18049], [18059, 18061]]$

$T = 3, Th = 10, Thn = 2423, [[21587, 21589], [21599, 21601], [21611, 21613]]$

$T = 4, Th = 2, Thn = 6315, [[62969, 62971], [62981, 62983], [62987, 62989], [63029, 63031]]$

$T = 4, Th = 3, Thn = 7147, [[72221, 72223], [72227, 72229], [72251, 72253], [72269, 72271]]$

$T = 4, Th = 4, Thn = 33251, [[392261, 392263], [392267, 392269], [392279, 392281], [392297, 392299]]$

$T = 4, Th = 5, Thn = 41197, [[495569, 495571], [495587, 495589], [495611, 495613], [495617, 495619]]$

$T = 4, Th = 6, Thn = 53831, [[663569, 663571], [663581, 663583], [663587, 663589],$

[[663599, 663601]]
$T = 4$, $Th = 7$, $Thn = 71968$, [[909287, 909289], [909299, 909301], [909317, 909319], [909329, 909331]]
$T = 5$, $Th = 1$, $Thn = 71968$, [[909287, 909289], [909299, 909301], [909317, 909319], [909329, 909331], [909341, 909343]]
$T = 4$, $Th = 8$, $Thn = 71970$, [[909299, 909301], [909317, 909319], [909329, 909331], [909341, 909343]]
$T = 4$, $Th = 9$, $Thn = 78967$, [[1006301, 1006303], [1006307, 1006309], [1006331, 1006333], [1006337, 1006339]]
$T = 4$, $Th = 10$, $Thn = 88482$, [[1138367, 1138369], [1138391, 1138393], [1138409, 1138411], [1138427, 1138429]]
$T = 5$, $Th = 2$, $Thn = 189647$, [[2596619, 2596621], [2596637, 2596639], [2596661, 2596663], [2596667, 2596669], [2596679, 2596681]]

Warning, computation interrupted

>

> # HI-NUM 005 PHYTAGORUS Number Table by H.E:

> with(StringTools) : FormatTime("%Y-%m-%d(%r)");

"2018-05-17(08:18:15 AM)" **(1)**

> $pc := 0$:**for** m **from** 2 **to** 17 **do for** n **from** 1 **to** $m-1$ **do** $pc := pc+1 : A := m^2-n^2 : B := 2 \cdot m \cdot n$:**if** $A > B$ **then** $AD := A : A := B : B := AD$ **fi**: $C := (m^2+n^2)$: print($A[a[pc]^2 = A^2]^2 + B[b[pc]^2 = B^2]^2 = C[c^2 = C^2]^2$) :**od**:**od**: FormatTime("%Y-%m-%d(%r)");

$$3^2_{a^2_1=9} + 4^2_{b^2_1=16} = 5^2_{c^2=25}$$

$$6^2_{a^2_2=36} + 8^2_{b^2_2=64} = 10^2_{c^2=100}$$

$$5^2_{a^2_3=25} + 12^2_{b^2_3=144} = 13^2_{c^2=169}$$

$$8^2_{a^2_4=64} + 15^2_{b^2_4=225} = 17^2_{c^2=289}$$

$$12^2_{a^2_5=144} + 16^2_{b^2_5=256} = 20^2_{c^2=400}$$

$$7^2_{a^2_6=49} + 24^2_{b^2_6=576} = 25^2_{c^2=625}$$

$$10^2_{a^2_7=100} + 24^2_{b^2_7=576} = 26^2_{c^2=676}$$

$$20^2_{a^2_8=400} + 21^2_{b^2_8=441} = 29^2_{c^2=841}$$

$$16^2_{a^2_9=256} + 30^2_{b^2_9=900} = 34^2_{c^2=1156}$$

$$9^2_{a^2_{10}=81} + 40^2_{b^2_{10}=1600} = 41^2_{c^2=1681}$$

$$12^2_{a^2_{11}=144} + 35^2_{b^2_{11}=1225} = 37^2_{c^2=1369}$$

$$24^2_{a^2_{12}=576} + 32^2_{b^2_{12}=1024} = 40^2_{c^2=1600}$$

$$27^2_{a^2_{13}=729} + 36^2_{b^2_{13}=1296} = 45^2_{c^2=2025}$$

$$20^2_{a^2_{14}=400} + 48^2_{b^2_{14}=2304} = 52^2_{c^2=2704}$$

$$11^2_{a^2_{15}=121} + 60^2_{b^2_{15}=3600} = 61^2_{c^2=3721}$$

$$14^2_{a^2_{16}=196} + 48^2_{b^2_{16}=2304} = 50^2_{c^2=2500}$$

$$28^2_{a^2_{17}=784} + 45^2_{b^2_{17}=2025} = 53^2_{c^2=2809}$$

$$40^2_{a^2_{18}=1600} + 42^2_{b^2_{18}=1764} = 58^2_{c^2=3364}$$

$$33^2_{a_{19}^2 = 1089} + 56^2_{b_{19}^2 = 3136} = 65^2_{c^2 = 4225}$$

$$24^2_{a_{20}^2 = 576} + 70^2_{b_{20}^2 = 4900} = 74^2_{c^2 = 5476}$$

$$13^2_{a_{21}^2 = 169} + 84^2_{b_{21}^2 = 7056} = 85^2_{c^2 = 7225}$$

$$16^2_{a_{22}^2 = 256} + 63^2_{b_{22}^2 = 3969} = 65^2_{c^2 = 4225}$$

$$32^2_{a_{23}^2 = 1024} + 60^2_{b_{23}^2 = 3600} = 68^2_{c^2 = 4624}$$

$$48^2_{a_{24}^2 = 2304} + 55^2_{b_{24}^2 = 3025} = 73^2_{c^2 = 5329}$$

$$48^2_{a_{25}^2 = 2304} + 64^2_{b_{25}^2 = 4096} = 80^2_{c^2 = 6400}$$

$$39^2_{a_{26}^2 = 1521} + 80^2_{b_{26}^2 = 6400} = 89^2_{c^2 = 7921}$$

$$28^2_{a_{27}^2 = 784} + 96^2_{b_{27}^2 = 9216} = 100^2_{c^2 = 10000}$$

$$15^2_{a_{28}^2 = 225} + 112^2_{b_{28}^2 = 12544} = 113^2_{c^2 = 12769}$$

$$18^2_{a_{29}^2 = 324} + 80^2_{b_{29}^2 = 6400} = 82^2_{c^2 = 6724}$$

$$36^2_{a_{30}^2 = 1296} + 77^2_{b_{30}^2 = 5929} = 85^2_{c^2 = 7225}$$

$$54^2_{a_{31}^2 = 2916} + 72^2_{b_{31}^2 = 5184} = 90^2_{c^2 = 8100}$$

$$65^2_{a_{32}^2 = 4225} + 72^2_{b_{32}^2 = 5184} = 97^2_{c^2 = 9409}$$

$$56^2_{a_{33}^2 = 3136} + 90^2_{b_{33}^2 = 8100} = 106^2_{c^2 = 11236}$$

$$45^2_{a_{34}^2 = 2025} + 108^2_{b_{34}^2 = 11664} = 117^2_{c^2 = 13689}$$

$$32^2_{a_{35}^2 = 1024} + 126^2_{b_{35}^2 = 15876} = 130^2_{c^2 = 16900}$$

$$17^2_{a_{36}^2 = 289} + 144^2_{b_{36}^2 = 20736} = 145^2_{c^2 = 21025}$$

$$20^2_{a_{37}^2 = 400} + 99^2_{b_{37}^2 = 9801} = 101^2_{c^2 = 10201}$$

$$40^2_{a_{38}^2 = 1600} + 96^2_{b_{38}^2 = 9216} = 104^2_{c^2 = 10816}$$

$$60^2_{a_{39}^2 = 3600} + 91^2_{b_{39}^2 = 8281} = 109^2_{c^2 = 11881}$$

$$80^2_{a_{40}^2 = 6400} + 84^2_{b_{40}^2 = 7056} = 116^2_{c^2 = 13456}$$

$$75^2_{a_{41}^2 = 5625} + 100^2_{b_{41}^2 = 10000} = 125^2_{c^2 = 15625}$$

$$64^2_{a_{42}^2 = 4096} + 120^2_{b_{42}^2 = 14400} = 136^2_{c^2 = 18496}$$

$$51^2_{a_{43}^2 = 2601} + 140^2_{b_{43}^2 = 19600} = 149^2_{c^2 = 22201}$$

$$36^2_{a_{44}^2 = 1296} + 160^2_{b_{44}^2 = 25600} = 164^2_{c^2 = 26896}$$

$$19^2_{a_{45}^2 = 361} + 180^2_{b_{45}^2 = 32400} = 181^2_{c^2 = 32761}$$

$$22^2_{a_{46}^2 = 484} + 120^2_{b_{46}^2 = 14400} = 122^2_{c^2 = 14884}$$

$$44^2_{a_{47}^2 = 1936} + 117^2_{b_{47}^2 = 13689} = 125^2_{c^2 = 15625}$$

$$66^2_{a_{48}^2 = 4356} + 112^2_{b_{48}^2 = 12544} = 130^2_{c^2 = 16900}$$

$$88^2_{a_{49}^2 = 7744} + 105^2_{b_{49}^2 = 11025} = 137^2_{c^2 = 18769}$$

$$96^2_{a_{50}^2 = 9216} + 110^2_{b_{50}^2 = 12100} = 146^2_{c^2 = 21316}$$

$$85^2_{a_{51}^2 = 7225} + 132^2_{b_{51}^2 = 17424} = 157^2_{c^2 = 24649}$$

$$72^2_{a_{52}^2 = 5184} + 154^2_{b_{52}^2 = 23716} = 170^2_{c^2 = 28900}$$

$$57^2_{a_{53}^2 = 3249} + 176^2_{b_{53}^2 = 30976} = 185^2_{c^2 = 34225}$$

$$40^2_{a_{54}^2 = 1600} + 198^2_{b_{54}^2 = 39204} = 202^2_{c^2 = 40804}$$

$$21^2_{a_{55}^2 = 441} + 220^2_{b_{55}^2 = 48400} = 221^2_{c^2 = 48841}$$

$$24^2_{a_{56}^2 = 576} + 143^2_{b_{56}^2 = 20449} = 145^2_{c^2 = 21025}$$

$$48^2_{a_{57}^2 = 2304} + 140^2_{b_{57}^2 = 19600} = 148^2_{c^2 = 21904}$$

$$72^2_{a_{58}^2 = 5184} + 135^2_{b_{58}^2 = 18225} = 153^2_{c^2 = 23409}$$

$$96^2_{a_{59}^2 = 9216} + 128^2_{b_{59}^2 = 16384} = 160^2_{c^2 = 25600}$$

$$119^2_{a_{60}^2 = 14161} + 120^2_{b_{60}^2 = 14400} = 169^2_{c^2 = 28561}$$

$$108^2_{a_{61}^2 = 11664} + 144^2_{b_{61}^2 = 20736} = 180^2_{c^2 = 32400}$$

$$95^2_{a_{62}^2 = 9025} + 168^2_{b_{62}^2 = 28224} = 193^2_{c^2 = 37249}$$

$$80^2_{a_{63}^2=6400}+192^2_{b_{63}^2=36864}=208^2_{c^2=43264}$$

$$63^2_{a_{64}^2=3969}+216^2_{b_{64}^2=46656}=225^2_{c^2=50625}$$

$$44^2_{a_{65}^2=1936}+240^2_{b_{65}^2=57600}=244^2_{c^2=59536}$$

$$23^2_{a_{66}^2=529}+264^2_{b_{66}^2=69696}=265^2_{c^2=70225}$$

$$26^2_{a_{67}^2=676}+168^2_{b_{67}^2=28224}=170^2_{c^2=28900}$$

$$52^2_{a_{68}^2=2704}+165^2_{b_{68}^2=27225}=173^2_{c^2=29929}$$

$$78^2_{a_{69}^2=6084}+160^2_{b_{69}^2=25600}=178^2_{c^2=31684}$$

$$104^2_{a_{70}^2=10816}+153^2_{b_{70}^2=23409}=185^2_{c^2=34225}$$

$$130^2_{a_{71}^2=16900}+144^2_{b_{71}^2=20736}=194^2_{c^2=37636}$$

$$133^2_{a_{72}^2=17689}+156^2_{b_{72}^2=24336}=205^2_{c^2=42025}$$

$$120^2_{a_{73}^2=14400}+182^2_{b_{73}^2=33124}=218^2_{c^2=47524}$$

$$105^2_{a_{74}^2=11025}+208^2_{b_{74}^2=43264}=233^2_{c^2=54289}$$

$$88^2_{a_{75}^2=7744}+234^2_{b_{75}^2=54756}=250^2_{c^2=62500}$$

$$69^2_{a_{76}^2=4761}+260^2_{b_{76}^2=67600}=269^2_{c^2=72361}$$

$$48^2_{a_{77}^2=2304}+286^2_{b_{77}^2=81796}=290^2_{c^2=84100}$$

$$25^2_{a_{78}^2=625}+312^2_{b_{78}^2=97344}=313^2_{c^2=97969}$$

$$28^2_{a_{79}^2=784}+195^2_{b_{79}^2=38025}=197^2_{c^2=38809}$$

$$56^2_{a_{80}^2=3136}+192^2_{b_{80}^2=36864}=200^2_{c^2=40000}$$

$$84^2_{a_{81}^2=7056}+187^2_{b_{81}^2=34969}=205^2_{c^2=42025}$$

$$112^2_{a_{82}^2=12544}+180^2_{b_{82}^2=32400}=212^2_{c^2=44944}$$

$$140^2_{a_{83}^2=19600}+171^2_{b_{83}^2=29241}=221^2_{c^2=48841}$$

$$160^2_{a_{84}^2=25600}+168^2_{b_{84}^2=28224}=232^2_{c^2=53824}$$

$$147^2_{a^2_{85}=21609}+196^2_{b^2_{85}=38416}=245^2_{c^2=60025}$$
$$132^2_{a^2_{86}=17424}+224^2_{b^2_{86}=50176}=260^2_{c^2=67600}$$
$$115^2_{a^2_{87}=13225}+252^2_{b^2_{87}=63504}=277^2_{c^2=76729}$$
$$96^2_{a^2_{88}=9216}+280^2_{b^2_{88}=78400}=296^2_{c^2=87616}$$
$$75^2_{a^2_{89}=5625}+308^2_{b^2_{89}=94864}=317^2_{c^2=100489}$$
$$52^2_{a^2_{90}=2704}+336^2_{b^2_{90}=112896}=340^2_{c^2=115600}$$
$$27^2_{a^2_{91}=729}+364^2_{b^2_{91}=132496}=365^2_{c^2=133225}$$
$$30^2_{a^2_{92}=900}+224^2_{b^2_{92}=50176}=226^2_{c^2=51076}$$
$$60^2_{a^2_{93}=3600}+221^2_{b^2_{93}=48841}=229^2_{c^2=52441}$$
$$90^2_{a^2_{94}=8100}+216^2_{b^2_{94}=46656}=234^2_{c^2=54756}$$
$$120^2_{a^2_{95}=14400}+209^2_{b^2_{95}=43681}=241^2_{c^2=58081}$$
$$150^2_{a^2_{96}=22500}+200^2_{b^2_{96}=40000}=250^2_{c^2=62500}$$
$$180^2_{a^2_{97}=32400}+189^2_{b^2_{97}=35721}=261^2_{c^2=68121}$$
$$176^2_{a^2_{98}=30976}+210^2_{b^2_{98}=44100}=274^2_{c^2=75076}$$
$$161^2_{a^2_{99}=25921}+240^2_{b^2_{99}=57600}=289^2_{c^2=83521}$$
$$144^2_{a^2_{100}=20736}+270^2_{b^2_{100}=72900}=306^2_{c^2=93636}$$
$$125^2_{a^2_{101}=15625}+300^2_{b^2_{101}=90000}=325^2_{c^2=105625}$$
$$104^2_{a^2_{102}=10816}+330^2_{b^2_{102}=108900}=346^2_{c^2=119716}$$
$$81^2_{a^2_{103}=6561}+360^2_{b^2_{103}=129600}=369^2_{c^2=136161}$$
$$56^2_{a^2_{104}=3136}+390^2_{b^2_{104}=152100}=394^2_{c^2=155236}$$
$$29^2_{a^2_{105}=841}+420^2_{b^2_{105}=176400}=421^2_{c^2=177241}$$
$$32^2_{a^2_{106}=1024}+255^2_{b^2_{106}=65025}=257^2_{c^2=66049}$$

$$64^2_{a_{107}^2 = 4096} + 252^2_{b_{107}^2 = 63504} = 260^2_{c^2 = 67600}$$

$$96^2_{a_{108}^2 = 9216} + 247^2_{b_{108}^2 = 61009} = 265^2_{c^2 = 70225}$$

$$128^2_{a_{109}^2 = 16384} + 240^2_{b_{109}^2 = 57600} = 272^2_{c^2 = 73984}$$

$$160^2_{a_{110}^2 = 25600} + 231^2_{b_{110}^2 = 53361} = 281^2_{c^2 = 78961}$$

$$192^2_{a_{111}^2 = 36864} + 220^2_{b_{111}^2 = 48400} = 292^2_{c^2 = 85264}$$

$$207^2_{a_{112}^2 = 42849} + 224^2_{b_{112}^2 = 50176} = 305^2_{c^2 = 93025}$$

$$192^2_{a_{113}^2 = 36864} + 256^2_{b_{113}^2 = 65536} = 320^2_{c^2 = 102400}$$

$$175^2_{a_{114}^2 = 30625} + 288^2_{b_{114}^2 = 82944} = 337^2_{c^2 = 113569}$$

$$156^2_{a_{115}^2 = 24336} + 320^2_{b_{115}^2 = 102400} = 356^2_{c^2 = 126736}$$

$$135^2_{a_{116}^2 = 18225} + 352^2_{b_{116}^2 = 123904} = 377^2_{c^2 = 142129}$$

$$112^2_{a_{117}^2 = 12544} + 384^2_{b_{117}^2 = 147456} = 400^2_{c^2 = 160000}$$

$$87^2_{a_{118}^2 = 7569} + 416^2_{b_{118}^2 = 173056} = 425^2_{c^2 = 180625}$$

$$60^2_{a_{119}^2 = 3600} + 448^2_{b_{119}^2 = 200704} = 452^2_{c^2 = 204304}$$

$$31^2_{a_{120}^2 = 961} + 480^2_{b_{120}^2 = 230400} = 481^2_{c^2 = 231361}$$

$$34^2_{a_{121}^2 = 1156} + 288^2_{b_{121}^2 = 82944} = 290^2_{c^2 = 84100}$$

$$68^2_{a_{122}^2 = 4624} + 285^2_{b_{122}^2 = 81225} = 293^2_{c^2 = 85849}$$

$$102^2_{a_{123}^2 = 10404} + 280^2_{b_{123}^2 = 78400} = 298^2_{c^2 = 88804}$$

$$136^2_{a_{124}^2 = 18496} + 273^2_{b_{124}^2 = 74529} = 305^2_{c^2 = 93025}$$

$$170^2_{a_{125}^2 = 28900} + 264^2_{b_{125}^2 = 69696} = 314^2_{c^2 = 98596}$$

$$204^2_{a_{126}^2 = 41616} + 253^2_{b_{126}^2 = 64009} = 325^2_{c^2 = 105625}$$

$$238^2_{a_{127}^2 = 56644} + 240^2_{b_{127}^2 = 57600} = 338^2_{c^2 = 114244}$$

$$225^2_{a_{128}^2 = 50625} + 272^2_{b_{128}^2 = 73984} = 353^2_{c^2 = 124609}$$

$$208^2_{a^2_{129}=43264} + 306^2_{b^2_{129}=93636} = 370^2_{c^2=136900}$$

$$189^2_{a^2_{130}=35721} + 340^2_{b^2_{130}=115600} = 389^2_{c^2=151321}$$

$$168^2_{a^2_{131}=28224} + 374^2_{b^2_{131}=139876} = 410^2_{c^2=168100}$$

$$145^2_{a^2_{132}=21025} + 408^2_{b^2_{132}=166464} = 433^2_{c^2=187489}$$

$$120^2_{a^2_{133}=14400} + 442^2_{b^2_{133}=195364} = 458^2_{c^2=209764}$$

$$93^2_{a^2_{134}=8649} + 476^2_{b^2_{134}=226576} = 485^2_{c^2=235225}$$

$$64^2_{a^2_{135}=4096} + 510^2_{b^2_{135}=260100} = 514^2_{c^2=264196}$$

$$33^2_{a^2_{136}=1089} + 544^2_{b^2_{136}=295936} = 545^2_{c^2=297025}$$

"2018-05-17(09:09:53 AM)" **(2)**

> *FormatTime*("%Y-%m-%d(%r)");**for** h **from** 2 **to** 3 **do** $c := 0$: **for** x **from** 1 **to** 1000 **do for** y **from** $x+1$ **to** 1000 **do if** $\text{floor}\left(evalf\left(\left(x^h+y^h\right)^{\frac{1}{h+2}}\right)\right)^{h+2} = x^h + y^h$ **then** $c := c+1$: $print\left([x]^h + [y]^h = \left[simplify\left(\left(x^h+y^h\right)^{\frac{1}{h+2}}\right)_{[c]}\right]^{h+2}\right)$ **fi**:**od**:**od**:
> *print*(*FormatTime*("%Y-%m-%d(%r)")) :**od**:

"2018-05-17(10:11:09 AM)"

$$[7]^2 + [24]^2 = [5_1]^4$$

$$[15]^2 + [20]^2 = [5_2]^4$$

$$[28]^2 + [96]^2 = [10_3]^4$$

$$[41]^2 + [840]^2 = [29_4]^4$$

$$[60]^2 + [80]^2 = [10_5]^4$$

$$[63]^2 + [216]^2 = [15_6]^4$$

$$[65]^2 + [156]^2 = [13_7]^4$$

$$[112]^2 + [384]^2 = [20_8]^4$$

$$[119]^2 + [120]^2 = [13_9]^4$$

$$[135]^2 + [180]^2 = [15_{10}]^4$$

$$[136]^2 + [255]^2 = [17_{11}]^4$$

$$[161]^2 + [240]^2 = [17_{12}]^4$$

$$[175]^2 + [600]^2 = [25_{13}]^4$$

$$[220]^2 + [585]^2 = [25_{14}]^4$$

$$[240]^2 + [320]^2 = [20_{15}]^4$$
$$[252]^2 + [864]^2 = [30_{16}]^4$$
$$[260]^2 + [624]^2 = [26_{17}]^4$$
$$[336]^2 + [527]^2 = [25_{18}]^4$$
$$[375]^2 + [500]^2 = [25_{19}]^4$$
$$[476]^2 + [480]^2 = [26_{20}]^4$$
$$[540]^2 + [720]^2 = [30_{21}]^4$$
$$[580]^2 + [609]^2 = [29_{22}]^4$$
$$[644]^2 + [960]^2 = [34_{23}]^4$$
$$[735]^2 + [980]^2 = [35_{24}]^4$$

"2018-05-17(10:11:39 AM)"

$$[3]^3 + [6]^3 = [3_1]^5$$
$$[96]^3 + [192]^3 = [24_2]^5$$

"2018-05-17(10:12:09 AM)" **(3)**

>

>

>];

> $\# x^{h} = y^{h-1} + z^{h-1}$ **by** $H \bullet E$ 2018 − 4 − 5 :

> $c := 0 : x := 2$:**for** h **from** 2 **to** 42 **do** $x := 2 \cdot x - 1 : y := x : z := 2 \cdot y :$ **if** $x^{h} = y^{h-1} + z^{h-1}$ **then** $print\left(x[_{\circ}\ ]^{h} = y[_{\circ}\ ]^{h-1} + z[_{\circ}\ ]^{h-1}\right)$ **fi**:**od**:

$$3_{\circ}^{2} = 3_{\circ} + 6_{\circ}$$
$$5_{\circ}^{3} = 5_{\circ}^{2} + 10_{\circ}^{2}$$
$$9_{\circ}^{4} = 9_{\circ}^{3} + 18_{\circ}^{3}$$
$$17_{\circ}^{5} = 17_{\circ}^{4} + 34_{\circ}^{4}$$
$$33_{\circ}^{6} = 33_{\circ}^{5} + 66_{\circ}^{5}$$
$$65_{\circ}^{7} = 65_{\circ}^{6} + 130_{\circ}^{6}$$
$$129_{\circ}^{8} = 129_{\circ}^{7} + 258_{\circ}^{7}$$
$$257_{\circ}^{9} = 257_{\circ}^{8} + 514_{\circ}^{8}$$
$$513_{\circ}^{10} = 513_{\circ}^{9} + 1026_{\circ}^{9}$$
$$1025_{\circ}^{11} = 1025_{\circ}^{10} + 2050_{\circ}^{10}$$
$$2049_{\circ}^{12} = 2049_{\circ}^{11} + 4098_{\circ}^{11}$$
$$4097_{\circ}^{13} = 4097_{\circ}^{12} + 8194_{\circ}^{12}$$
$$8193_{\circ}^{14} = 8193_{\circ}^{13} + 16386_{\circ}^{13}$$
$$16385_{\circ}^{15} = 16385_{\circ}^{14} + 32770_{\circ}^{14}$$
$$32769_{\circ}^{16} = 32769_{\circ}^{15} + 65538_{\circ}^{15}$$
$$65537_{\circ}^{17} = 65537_{\circ}^{16} + 131074_{\circ}^{16}$$
$$131073_{\circ}^{18} = 131073_{\circ}^{17} + 262146_{\circ}^{17}$$
$$262145_{\circ}^{19} = 262145_{\circ}^{18} + 524290_{\circ}^{18}$$
$$524289_{\circ}^{20} = 524289_{\circ}^{19} + 1048578_{\circ}^{19}$$
$$1048577_{\circ}^{21} = 1048577_{\circ}^{20} + 2097154_{\circ}^{20}$$
$$2097153_{\circ}^{22} = 2097153_{\circ}^{21} + 4194306_{\circ}^{21}$$
$$4194305_{\circ}^{23} = 4194305_{\circ}^{22} + 8388610_{\circ}^{22}$$
$$8388609_{\circ}^{24} = 8388609_{\circ}^{23} + 16777218_{\circ}^{23}$$
$$16777217_{\circ}^{25} = 16777217_{\circ}^{24} + 33554434_{\circ}^{24}$$
$$33554433_{\circ}^{26} = 33554433_{\circ}^{25} + 67108866_{\circ}^{25}$$
$$67108865_{\circ}^{27} = 67108865_{\circ}^{26} + 134217730_{\circ}^{26}$$
$$134217729_{\circ}^{28} = 134217729_{\circ}^{27} + 268435458_{\circ}^{27}$$
$$268435457_{\circ}^{29} = 268435457_{\circ}^{28} + 536870914_{\circ}^{28}$$
$$536870913_{\circ}^{30} = 536870913_{\circ}^{29} + 1073741826_{\circ}^{29}$$
$$1073741825_{\circ}^{31} = 1073741825_{\circ}^{30} + 2147483650_{\circ}^{30}$$
$$2147483649_{\circ}^{32} = 2147483649_{\circ}^{31} + 4294967298_{\circ}^{31}$$
$$4294967297_{\circ}^{33} = 4294967297_{\circ}^{32} + 8589934594_{\circ}^{32}$$

> # *Definition Property of Number HeiPri[n]　by* 蛭子井博孝 四日市にて:

> *FormatTime*("%Y-%m-%d-(%r)");

"2018-05-13-(08:03:54 AM)" **(1)**

> $\# \{Hin = \frac{(p+\{q\}+r)}{nc} \Big| n = p\cdot\{q\}\cdot r[fcncen], (n = 1..infinity)\}$:

> $hin := 0 : hjn := 0 :$ print(number space, 自然内数、Hin[N]) :**for** n **from** 2 **to** 10000 **do** **if not** isprime(n) **then** $en := 0 : Fb := n : Fp := 2 : h := 0 : hi := 0 : he := 1 :$ **for** x **from** 1 **to** 10000 **do** **if** $Fb = 1$ **then break elif** $(Fb$ **mod** $Fp) = 0$ **then** $en := en + 1 : FPT \| en := Fp : Fb := \frac{Fb}{Fp} : hi := hi + Fp : he := he\cdot Fp$ **else** $Fp := nextprime(Fp)$ **end if** **od** : $Hin := \frac{hi}{en} : Hjn := he^{\frac{1}{en}}$: **if** type(Hin, integer) **and** $(n$ **mod** $Hin = 0)$ **and** $hin < 100$ **and** isprime$\left(\frac{(n^{Hin}-1)}{(n-1)}\right)$ **then** $hin := hin + 1 :$ print$\left(n[\text{素因数分解}([seq(FPT \| j, j = 1..en)])[en\ ko\text{の}\{\text{平均}\}]] = \{Hin\}\cdot\left(\left[\frac{n}{Hin}\right]\right), \left(\frac{N^{Hin}-1}{N-1}\right)[HeiPri[hin]] = \left(\frac{n^{Hin}-1}{n-1}\right)\right)$ **fi fi**: **od**: print(FormatTime("%Y-%m-%d-(%r)")) :

number space, 自然内数、Hin_N

$$4_{\text{素因数分解}([2,2])_{2\,ko\text{の}\{\text{平均}\}}} = \{2\}\,[2], \left(\frac{N^2-1}{N-1}\right)_{HeiPri_1} = 5$$

$$16_{\text{素因数分解}([2,2,2,2])_{4\,ko\text{の}\{\text{平均}\}}} = \{2\}\,[8], \left(\frac{N^2-1}{N-1}\right)_{HeiPri_2} = 17$$

$$27_{\text{素因数分解}([3,3,3])_{3\,ko\text{の}\{\text{平均}\}}} = \{3\}\,[9], \left(\frac{N^3-1}{N-1}\right)_{HeiPri_3} = 757$$

$$256_{\text{素因数分解}([2,2,2,2,2,2,2,2])_{8\,ko\text{の}\{\text{平均}\}}} = \{2\}\,[128], \left(\frac{N^2-1}{N-1}\right)_{HeiPri_4} = 257$$

$$336_{\text{素因数分解}([2,2,2,2,3,7])_{6\,ko\text{の}\{\text{平均}\}}} = \{3\}\,[112], \left(\frac{N^3-1}{N-1}\right)_{HeiPri_5} = 113233$$

$$540_{\text{素因数分解}([2,2,3,3,3,5])_{6\,ko\text{の}\{\text{平均}\}}} = \{3\}\,[180], \left(\frac{N^3-1}{N-1}\right)_{HeiPri_6} = 292141$$

$$1200_{\text{素因数分解}([2,2,2,2,3,5,5])_{7\,ko\text{の}\{\text{平均}\}}} = \{3\}\,[400], \left(\frac{N^3-1}{N-1}\right)_{HeiPri_7} = 1441201$$

$$1620_{\text{素因数分解}([2,2,3,3,3,3,5])_{7\,ko\text{の}\{\text{平均}\}}} = \{3\}\,[540], \left(\frac{N^3-1}{N-1}\right)_{HeiPri_8} = 2626021$$

$$3024_{\text{素因数分解}([2,2,2,2,3,3,3,7])_{8\,ko\text{の}\{\text{平均}\}}} = \{3\}\,[1008], \left(\frac{N^3-1}{N-1}\right)_{HeiPri_9} = 9147601$$

$4123_{\text{素因数分解}([7,\ 19,\ 31])_{3\ ko\text{の}\{\text{平均}\}}} = \{19\}\ [217],\ \left(\frac{N^{19}-1}{N-1}\right)_{HeiPri_{10}}$

$= 118561960975858380637985463161812805133553555439677537886982165013$

$4560_{\text{素因数分解}([2,\ 2,\ 2,\ 2,\ 3,\ 5,\ 19])_{7\ ko\text{の}\{\text{平均}\}}} = \{5\}\ [912],\ \left(\frac{N^{5}-1}{N-1}\right)_{HeiPri_{11}}$

$= 432468640574161$

$6720_{\text{素因数分解}([2,\ 2,\ 2,\ 2,\ 2,\ 2,\ 3,\ 5,\ 7])_{9\ ko\text{の}\{\text{平均}\}}} = \{3\}\ [2240],\ \left(\frac{N^{3}-1}{N-1}\right)_{HeiPri_{12}} = 45165121$

$6800_{\text{素因数分解}([2,\ 2,\ 2,\ 2,\ 5,\ 5,\ 17])_{7\ ko\text{の}\{\text{平均}\}}} = \{5\}\ [1360],\ \left(\frac{N^{5}-1}{N-1}\right)_{HeiPri_{13}}$

$= 2138452078246801$

$7360_{\text{素因数分解}([2,\ 2,\ 2,\ 2,\ 2,\ 2,\ 5,\ 23])_{8\ ko\text{の}\{\text{平均}\}}} = \{5\}\ [1472],\ \left(\frac{N^{5}-1}{N-1}\right)_{HeiPri_{14}}$

$= 2934744306592961$

$9072_{\text{素因数分解}([2,\ 2,\ 2,\ 2,\ 3,\ 3,\ 3,\ 3,\ 7])_{9\ ko\text{の}\{\text{平均}\}}} = \{3\}\ [3024],\ \left(\frac{N^{3}-1}{N-1}\right)_{HeiPri_{15}} = 82310257$

"2018-05-13-(08:05:10 AM)" **(2)**

>

>

> # Hi NUM nfactor factor^h sum number **by** $H \cdot E$:

> $with(numtheory)$:

> $c := 0$: **for** n **from** 2 **to** 100 **do** $nc := 0 : fp := 2 : fsn := 0 : ft := n$:**for** m **from** 1 **to** n **do** **if** $ft = 0$ **then break elif** ft **mod** $fp = 0$ **then** $nc := nc + 1 :\ nf \| nc := fp : fsn := fsn + fp^2 : ft := \frac{ft}{fp}$:**else** $fp := nextprime(fp)$ **fi**:**od**:**if** $nc = 2$ **and** $c < 49$ **then** $c := c + 1$: $print\left(f^2 sum\ Num[c](n[[seq(nf \| j, j = 1 ..nc)]]) = fsn\right)$ **fi**:**od**:

$$f^2\ sum\ Num_{1}\left(4_{[2,\ 2]}\right) = 8$$
$$f^2\ sum\ Num_{2}\left(6_{[2,\ 3]}\right) = 13$$
$$f^2\ sum\ Num_{3}\left(9_{[3,\ 3]}\right) = 18$$
$$f^2\ sum\ Num_{4}\left(10_{[2,\ 5]}\right) = 29$$
$$f^2\ sum\ Num_{5}\left(14_{[2,\ 7]}\right) = 53$$
$$f^2\ sum\ Num_{6}\left(15_{[3,\ 5]}\right) = 34$$
$$f^2\ sum\ Num_{7}\left(21_{[3,\ 7]}\right) = 58$$
$$f^2\ sum\ Num_{8}\left(22_{[2,\ 11]}\right) = 125$$
$$f^2\ sum\ Num_{9}\left(25_{[5,\ 5]}\right) = 50$$
$$f^2\ sum\ Num_{10}\left(26_{[2,\ 13]}\right) = 173$$
$$f^2\ sum\ Num_{11}\left(33_{[3,\ 11]}\right) = 130$$
$$f^2\ sum\ Num_{12}\left(34_{[2,\ 17]}\right) = 293$$
$$f^2\ sum\ Num_{13}\left(35_{[5,\ 7]}\right) = 74$$
$$f^2\ sum\ Num_{14}\left(38_{[2,\ 19]}\right) = 365$$
$$f^2\ sum\ Num_{15}\left(39_{[3,\ 13]}\right) = 178$$
$$f^2\ sum\ Num_{16}\left(46_{[2,\ 23]}\right) = 533$$
$$f^2\ sum\ Num_{17}\left(49_{[7,\ 7]}\right) = 98$$
$$f^2\ sum\ Num_{18}\left(51_{[3,\ 17]}\right) = 298$$
$$f^2\ sum\ Num_{19}\left(55_{[5,\ 11]}\right) = 146$$
$$f^2\ sum\ Num_{20}\left(57_{[3,\ 19]}\right) = 370$$
$$f^2\ sum\ Num_{21}\left(58_{[2,\ 29]}\right) = 845$$
$$f^2\ sum\ Num_{22}\left(62_{[2,\ 31]}\right) = 965$$
$$f^2\ sum\ Num_{23}\left(65_{[5,\ 13]}\right) = 194$$
$$f^2\ sum\ Num_{24}\left(69_{[3,\ 23]}\right) = 538$$
$$f^2\ sum\ Num_{25}\left(74_{[2,\ 37]}\right) = 1373$$
$$f^2\ sum\ Num_{26}\left(77_{[7,\ 11]}\right) = 170$$

$$f^2 \text{ sum } Num_{27}(82_{[2, 41]}) = 1685$$
$$f^2 \text{ sum } Num_{28}(85_{[5, 17]}) = 314$$
$$f^2 \text{ sum } Num_{29}(86_{[2, 43]}) = 1853$$
$$f^2 \text{ sum } Num_{30}(87_{[3, 29]}) = 850$$
$$f^2 \text{ sum } Num_{31}(91_{[7, 13]}) = 218$$
$$f^2 \text{ sum } Num_{32}(93_{[3, 31]}) = 970$$
$$f^2 \text{ sum } Num_{33}(94_{[2, 47]}) = 2213$$
$$f^2 \text{ sum } Num_{34}(95_{[5, 19]}) = 386 \quad \textbf{(1)}$$

> $c := 0$: **for** n **from** 2 **to** 10000 **do** $nc := 0 : fp := 2 : fsn := 0 : ft := n$:**for** m **from** 1 **to** n **do**
if $ft = 0$ **then break elif** ft **mod** $fp = 0$ **then** $nc := nc + 1 : nf \| nc := fp : fsn := fsn + fp^3$:
$ft := \frac{ft}{fp}$:**else** $fp := nextprime(fp)$ **fi**:**od**:**if** $\text{floor}\left(evalf\left(fsn^{\frac{1}{3}}\right)\right)^3 = fsn$ **and** (
not $isprime(n)$) **then** $c := c + 1 : print\left(nc\, f^3 sum\ x^3\ Num[c](n[[seq(nf \| j, j = 1 ..nc)]]) = fsn\right)$ **fi** :**od**:

$$8\, f^3 \text{ sum } x^3\ Num_1(256_{[2, 2, 2, 2, 2, 2, 2, 2]}) = 64$$
$$5\, f^3 \text{ sum } x^3\ Num_2(588_{[2, 2, 3, 7, 7]}) = 729$$
$$4\, f^3 \text{ sum } x^3\ Num_3(693_{[3, 3, 7, 11]}) = 1728$$
$$10\, f^3 \text{ sum } x^3\ Num_4(3840_{[2, 2, 2, 2, 2, 2, 2, 2, 3, 5]}) = 216$$
$$8\, f^3 \text{ sum } x^3\ Num_5(6561_{[3, 3, 3, 3, 3, 3, 3, 3]}) = 216$$

Warning, computation interrupted

> n;

$$8185 \quad \textbf{(2)}$$

>

研究余話余話 2

研究の小径

　みなさんに便りできる機会を与えられ、感謝しています。

私、蛭子井博孝は、1969 年 4 月、大学紛争の真最中に入学し、11 月までの自宅待機を経て、授業を受けるという大変な時代を経て、1973 年に、卒業しました。大学時代、下宿と大学を往復するだけの毎日でした。毎日講義に出、週末の、土日には、卵形線の幾何学的自主研究をする毎日でした。4 回生の 7 月に、”デカルトの卵形線の２，３の性質”という、論文を学生会員になり図学会に投稿し、8 月の夏休みには、、4 月からの続きの大学院入試の勉強をし、どうにか合格、そして、10 月から、第五講座、鈴木達郎先生の下で、ドクターコースの黒田勝広先輩〔日立の中研に就職と聞く〕と、電子顕微鏡の電子レンズの卒研をはじめました。その思い出は、まず、当時は、パソコンはなく、TSS 端末で、大型電子計算機を使用して電子レンズの設計シュミレーション研究を開始し、その利用で、電子レンズの低電圧域の、レンズ条件が見つかり、後で聞いた話では、それが、当時 3000 万円のアイデア情報になった卒研でした。お金ではなく、シュミレーションの確認実験装置 3000 万円ぐらいの貸与を受けたそうです。とにかく、教授に「いい仕事をした」と、一言、いただいたのを覚えています。大学時代を語れば、講義にさぼらずで、板書の筆記に明け暮れ、週末に好きな、幾何学の研究をしていた、単純な勉学学生でした。講義の内容は、難しく、分量も多く、定期テストのための時間も十分でなく、未消化の講義内容ばかりでした。ひとつだけ、久保忠雄先生の応用数学の勉強は十分し、工学部高位の成績のようでした。大学院時代は、第一講座の安井裕助教授の下で、コンピューター関係の研究のお手伝いをして過ごしました。そこでは、数値処理でなく、数式処理のリスプ-インタープリター製作の手伝いと、インターネット開発実験を、ミニコン上で 4000 ステップ程度の機械語でする、インターネット通信制御の開発実行処理に明け暮れしました。この時代も、卵形線の独自研究は捨てられず、助教授に修論は、「つまらないものを書いて」と、ドアの向こうでつぶやかれるのを聞いて、、、しかし、修士も 4 年かかって、一応修了させてもらいました。その後は、地元で、高校の数学教師、研究所のコンピュータ SE、また、数学教師の後仕事を辞め、45 歳のとき、卵形線研究センターという自主研究室を開設し、幾何数学の研究を続けて、今に至っています。その間、卵形線の研究で、論文賞をもらい、それを機に、中年で発起し、国際会議に参加し、、、、、それも、10 回を超え、卵形線を Doval と改案命名し、ウクライナのキエフの KPI で、楕円の拡張の卵形線の焦点個数概念を一般化拡張して定義した Tajicoid を 2002 年に発表、 これで、楕円の拡張研究の旅路は、峠を越え、より一般基礎の幾何数学研究を続けることになりました。今年の春で、学会発表活動は、やめ、WEB サイト上で成果の発表できるホームページ作りに移行していきます。教育は、二十年後に役立つことを受けるといわれていますが、PC を使ったデスクワークが続けられるのも、皆さんとともに、応用物理に在籍したおかげだと、感謝しています。詳しいことは、私の http://geomathe.com/, http://hirotakaebisui.com/、上で公開していきます。研究目録、その他、詳しくわが人生の成果を語っています。よろしくご利用ください。

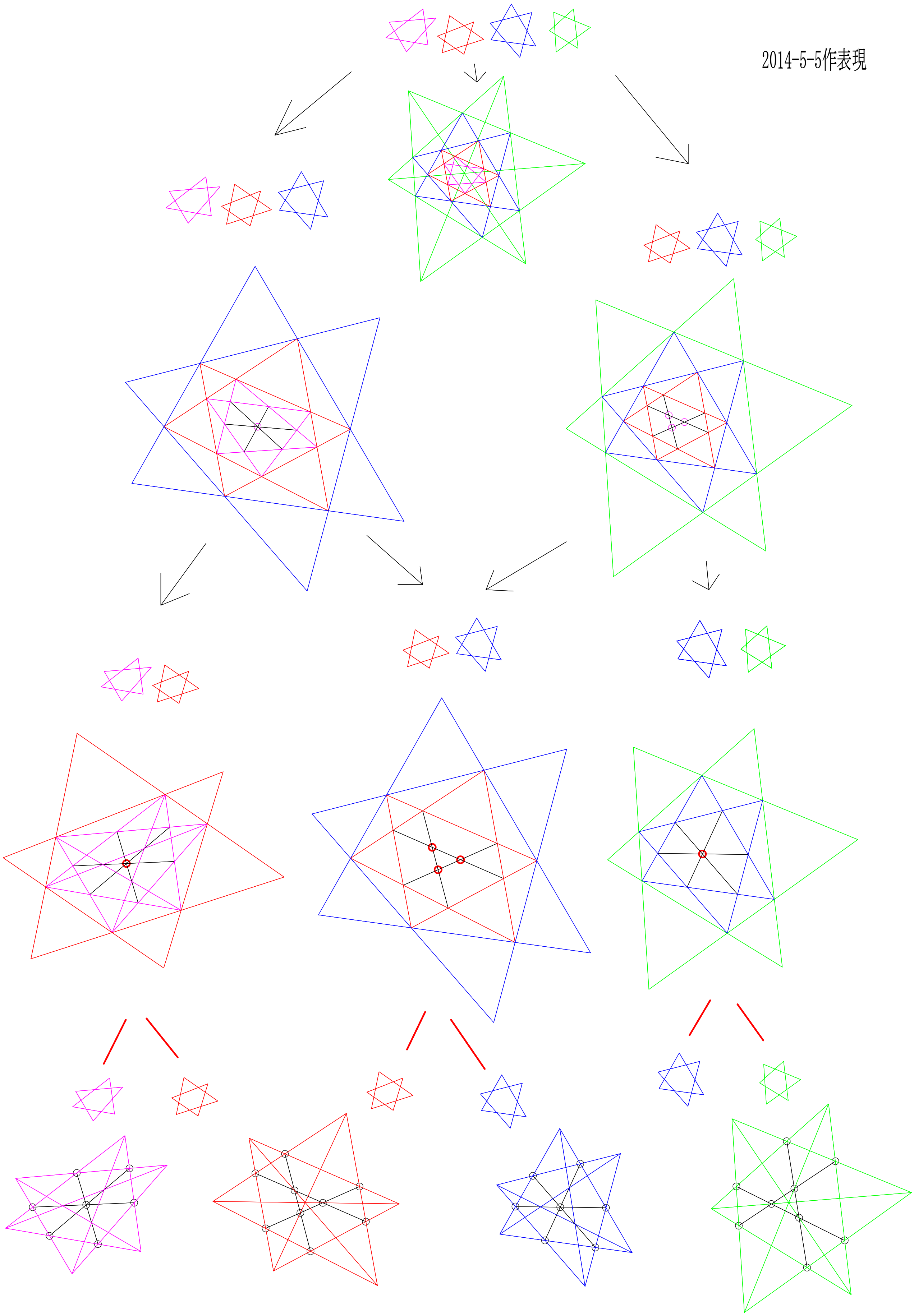
　今頃は、すべてを語れない哀しさと、一部でも語れる幸せ、を感じています。

　みなさん、ありがとう。

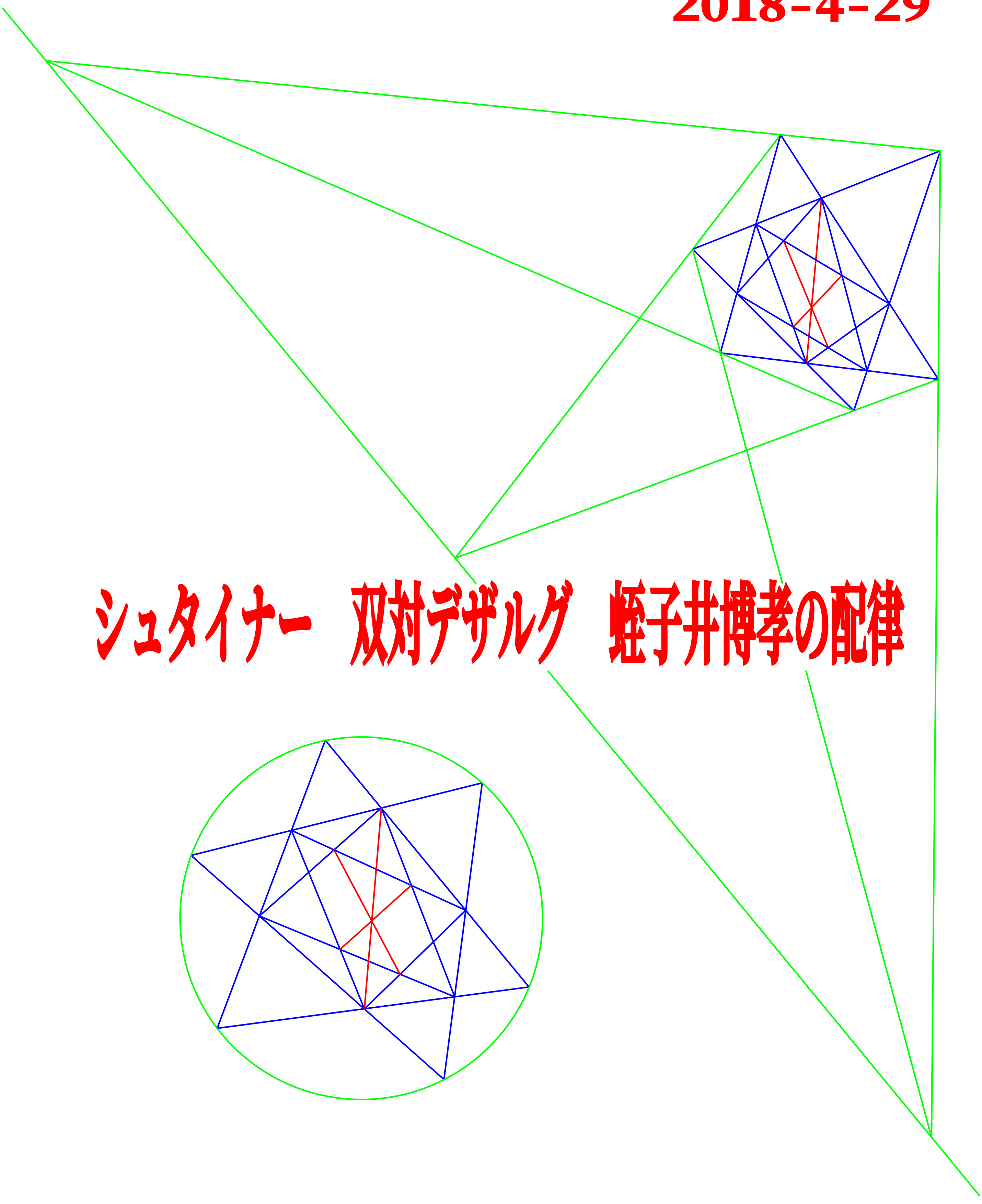
蛭子井博孝　2018-3-25 記 3-31 補

星々の連鎖公理　1点3点交互無限内層

2014-5-5作表現



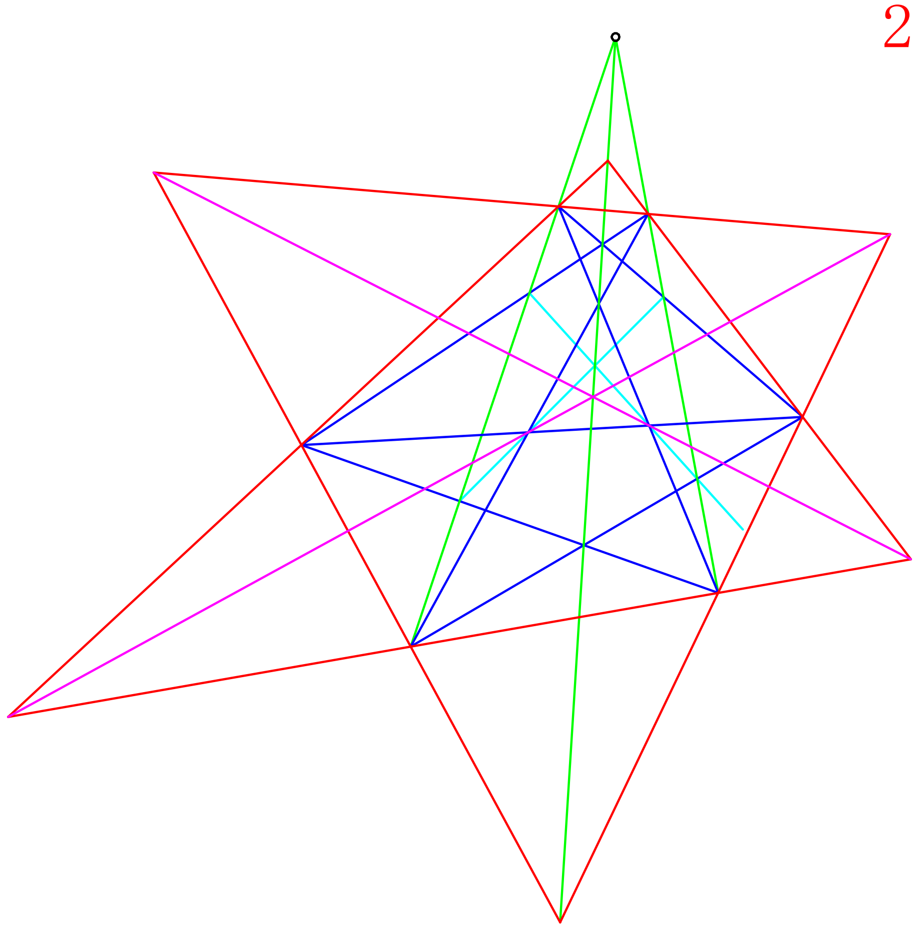
2018-4-29

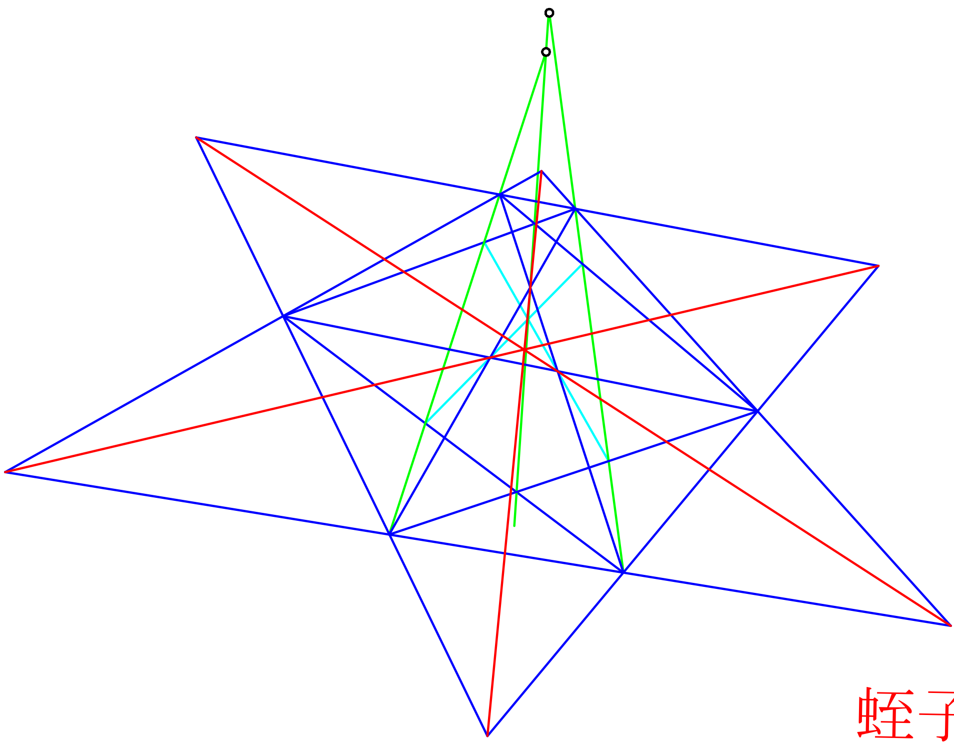


シュタイナー　双対デザルグ　蛭子井博孝の配律

共点、非共点３線上の共点定理

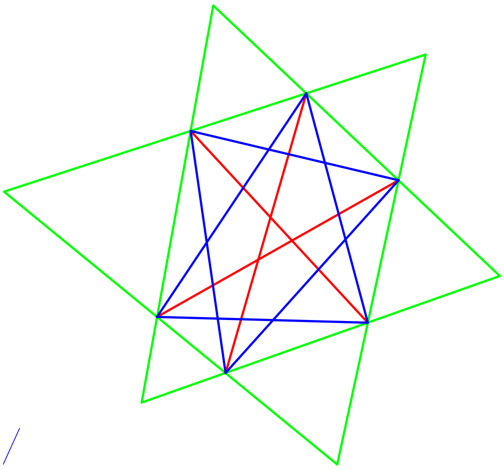
2018-4-7

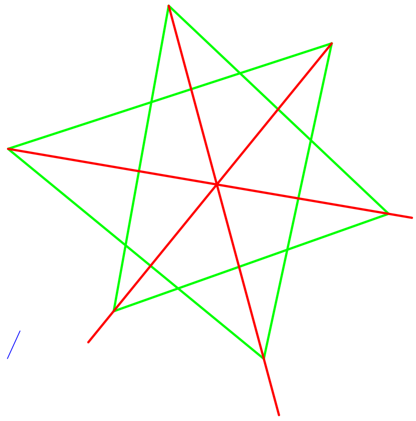


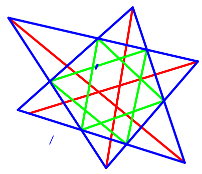


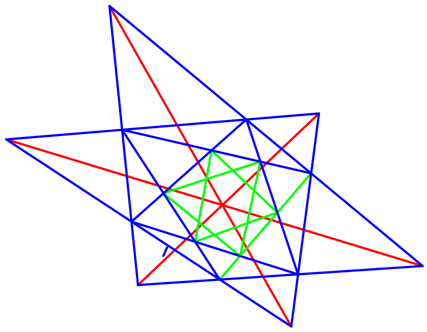
蛭子井博孝

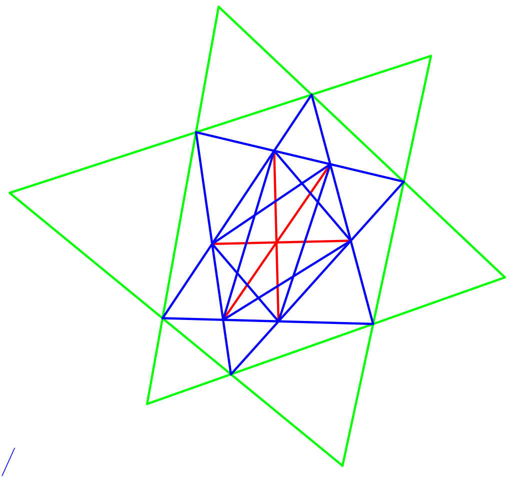
重ね合わせ三角形の構図問題

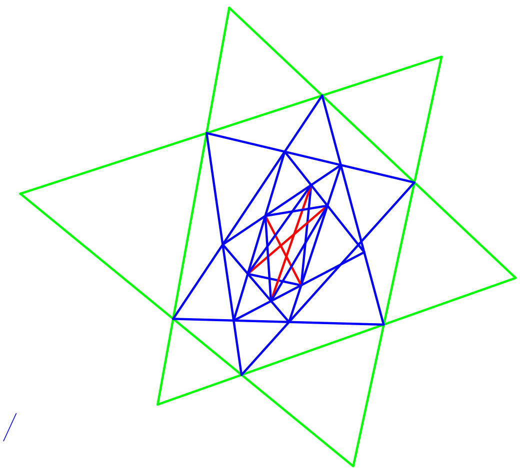


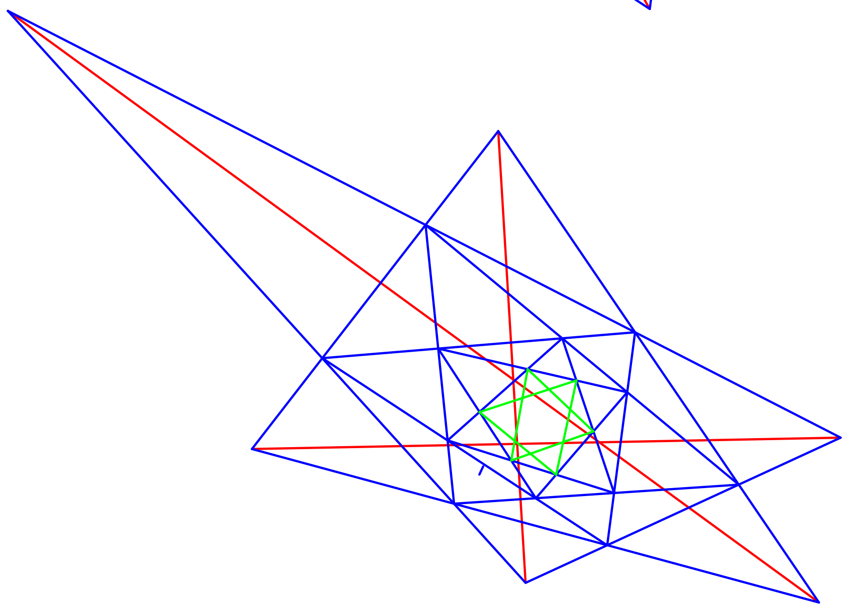






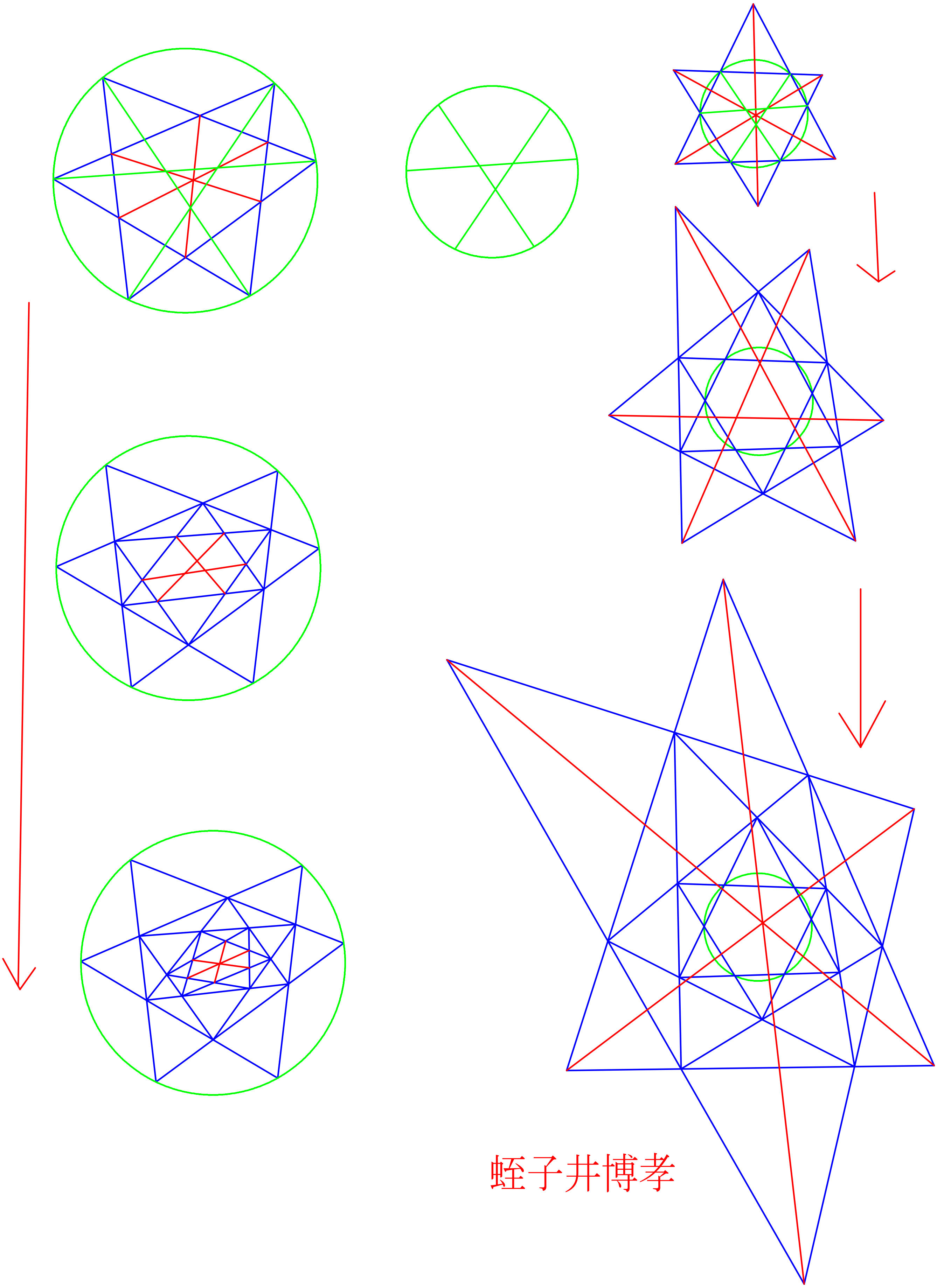






蛭子井博孝

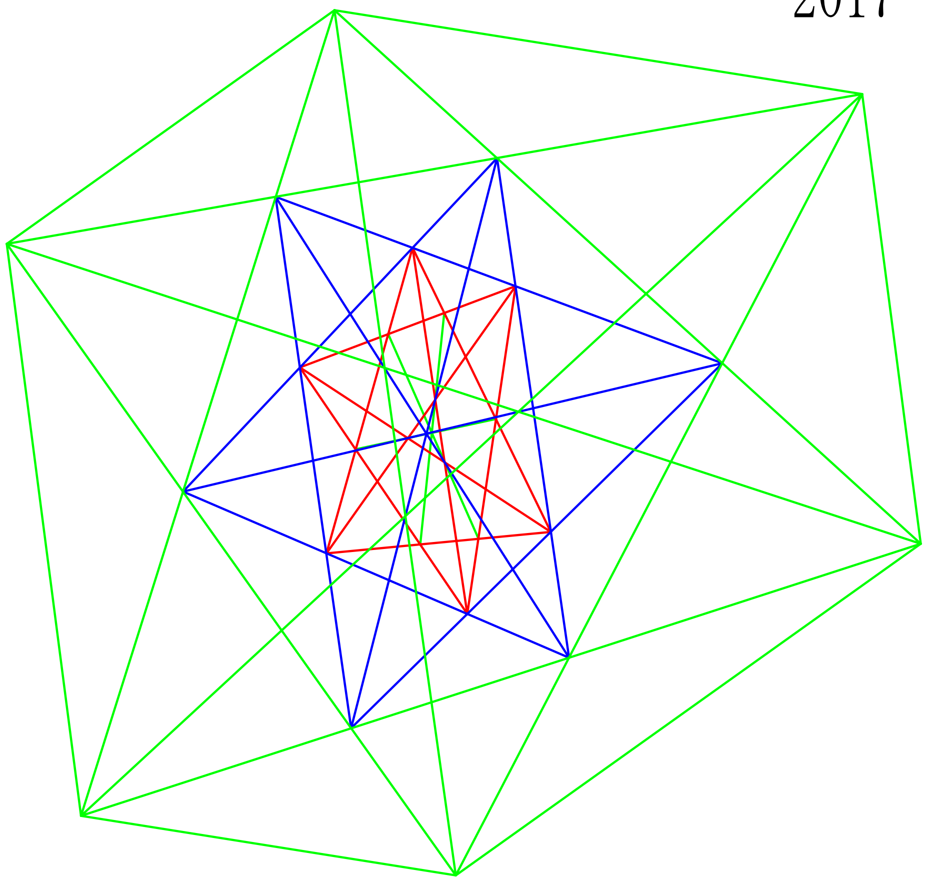
2次(円) 系非共点内部外部星々の定理

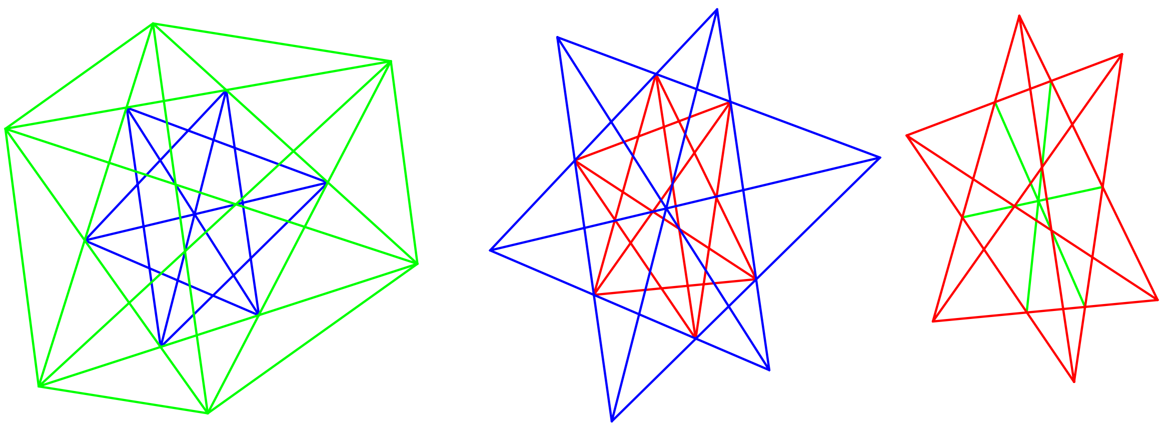


蛭子井博孝

非2次系3平行非共点星々の定理

2017−12−26





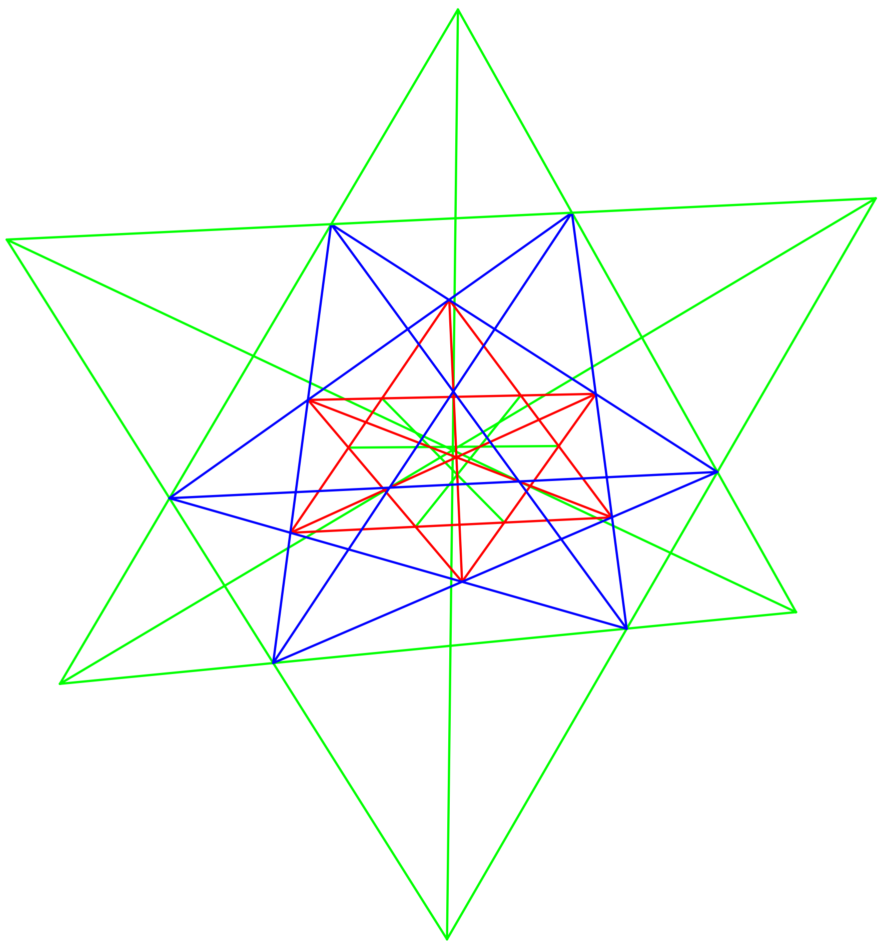
この星々の定理とは内部構成が、非共点共点非共点共点を繰り返すこと

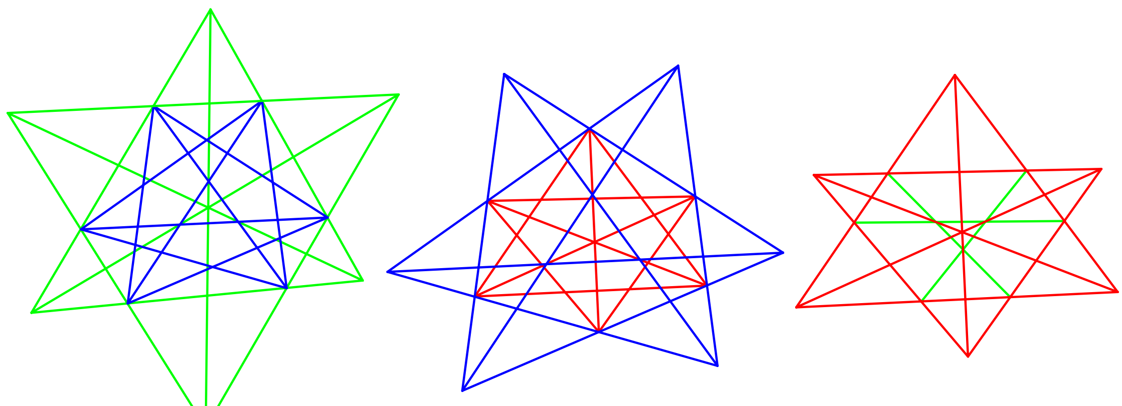
蛭子井博孝

非2次系共点星々の定理

星々の定理とは内部構成が、共点非共点共点非共点を繰り返すこと

2014−5−5





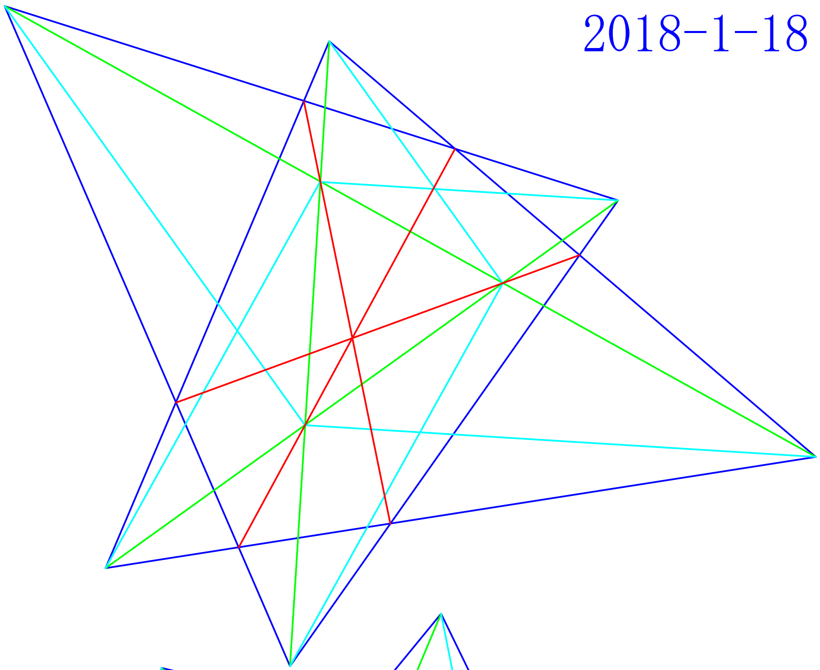
共点 非共点　　非共点 共点　　共点 非共点

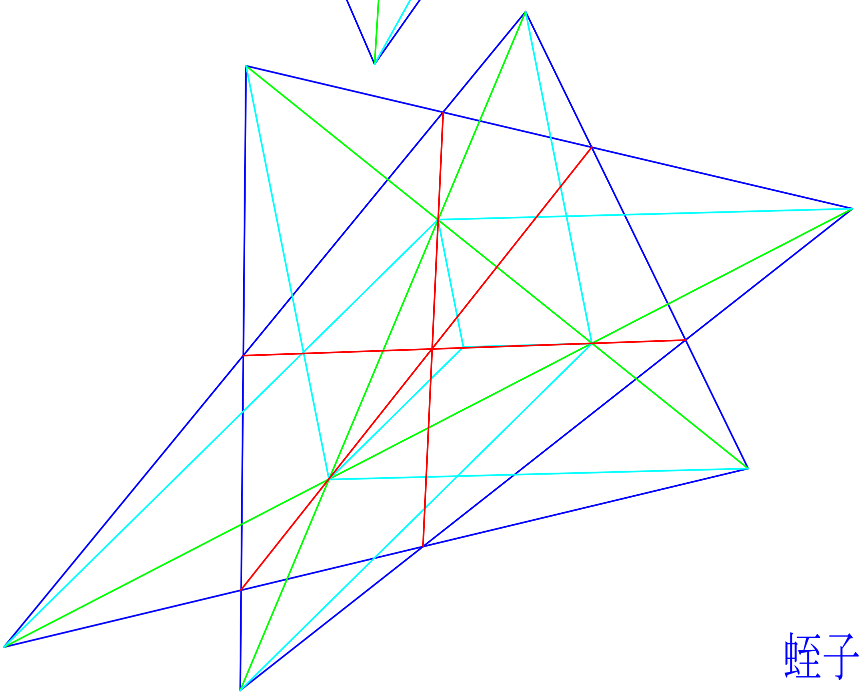
内部構成

蛭子井博孝

非共点から始まる星々の定理

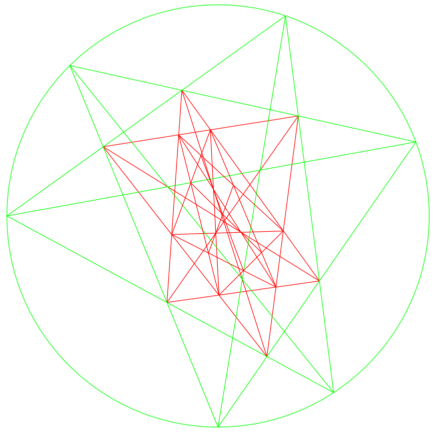
2018-1-18



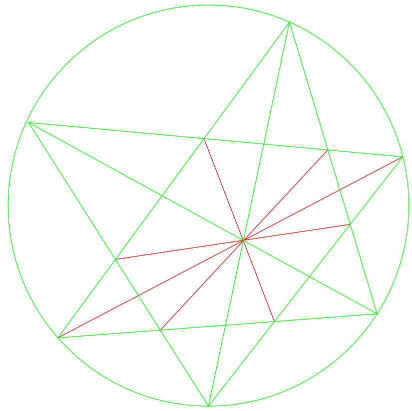


蛭子井博孝

ADE Probrem

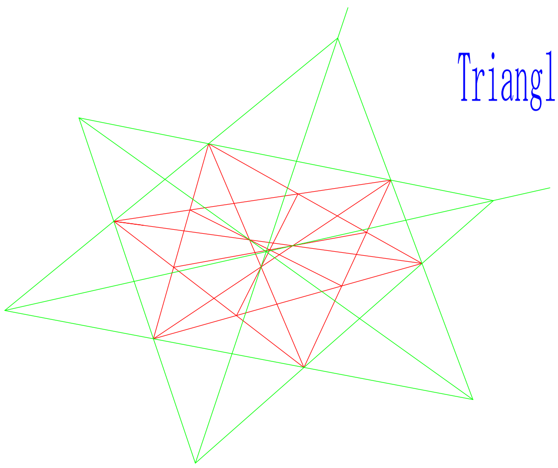


非共点異共点連鎖

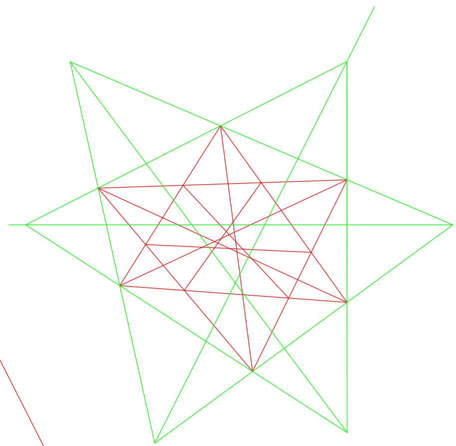


共点連鎖

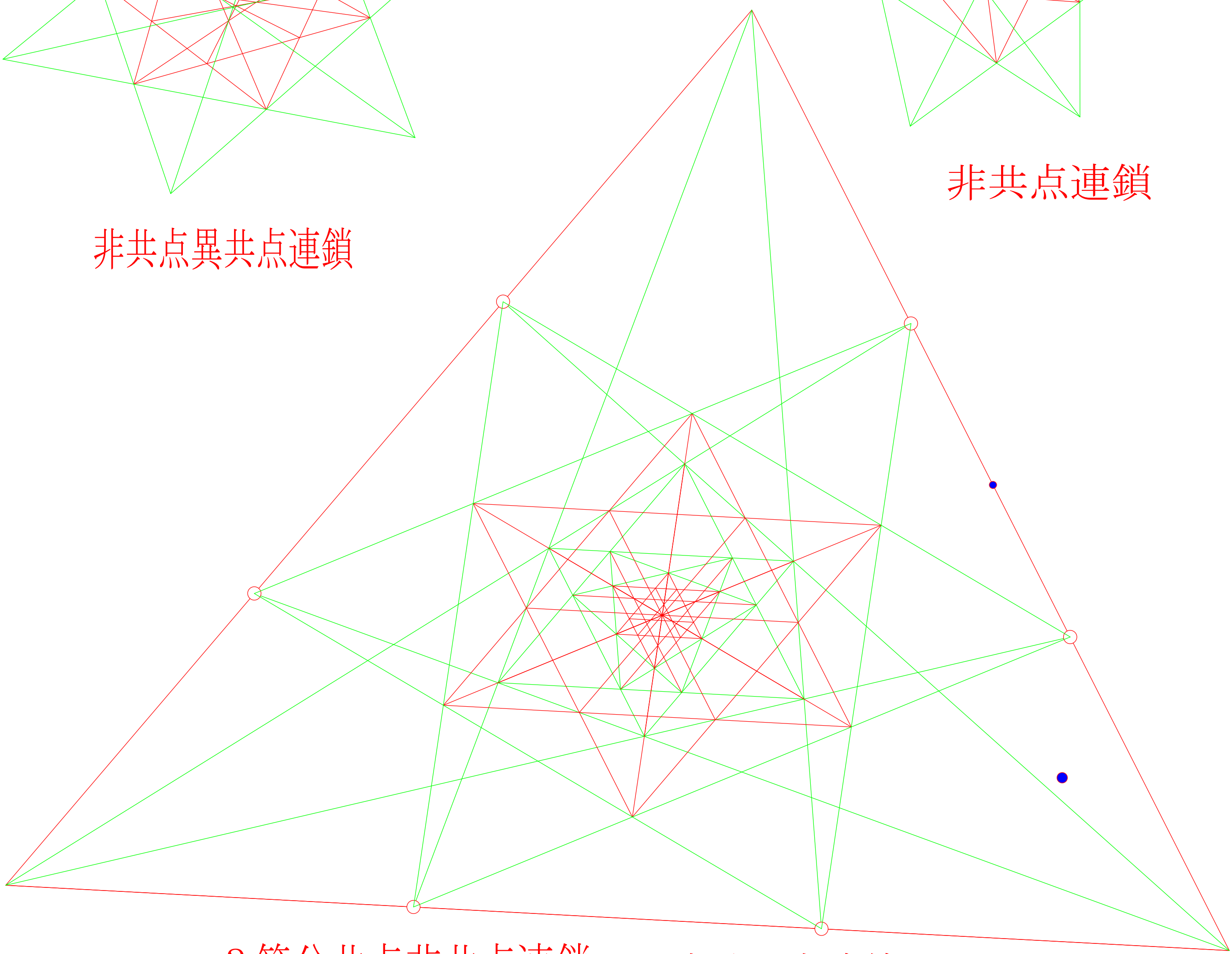
Triangle Overlap 5types



非共点異共点連鎖



非共点連鎖

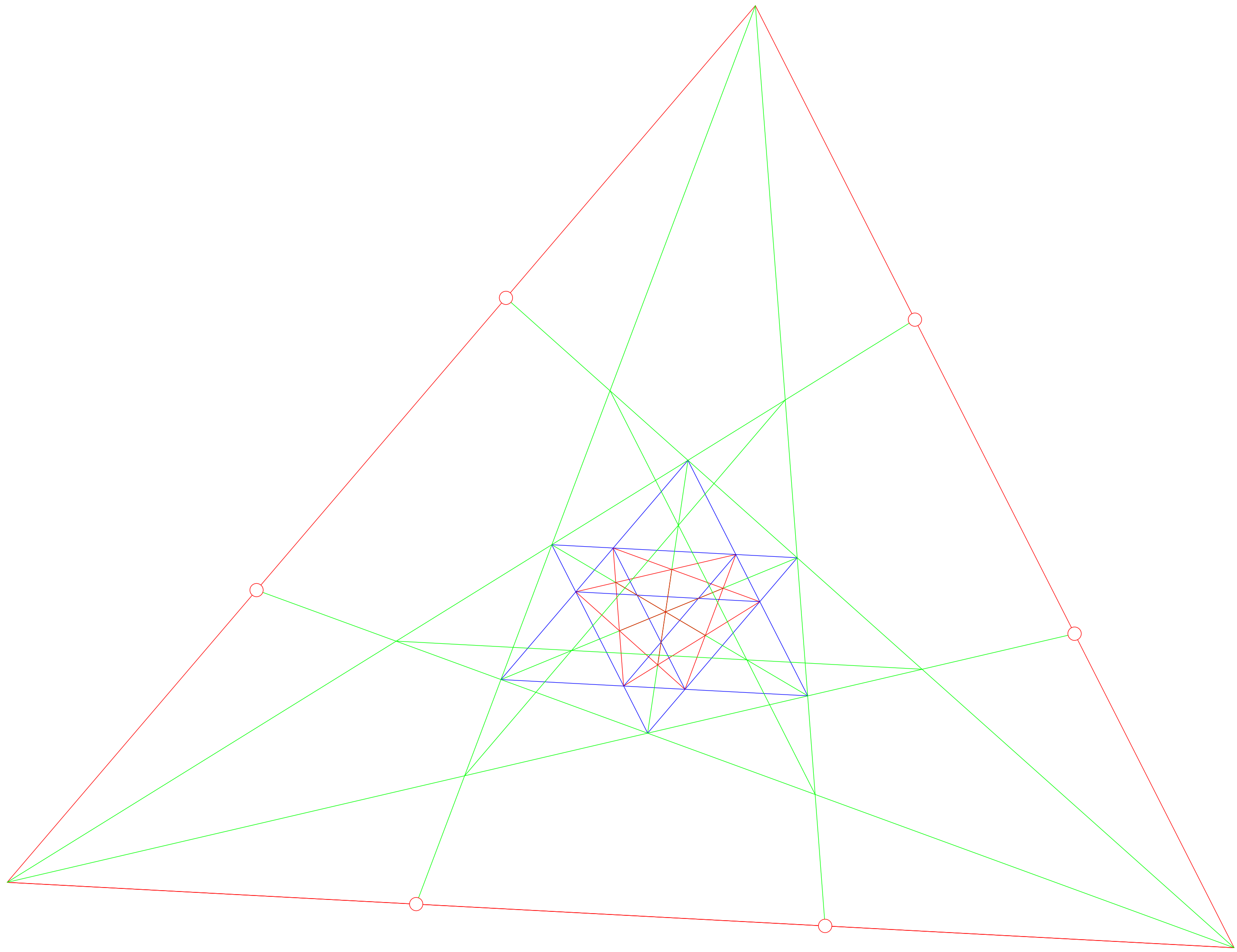


3等分共点非共点連鎖　共点非共点連鎖

ADE Probrem

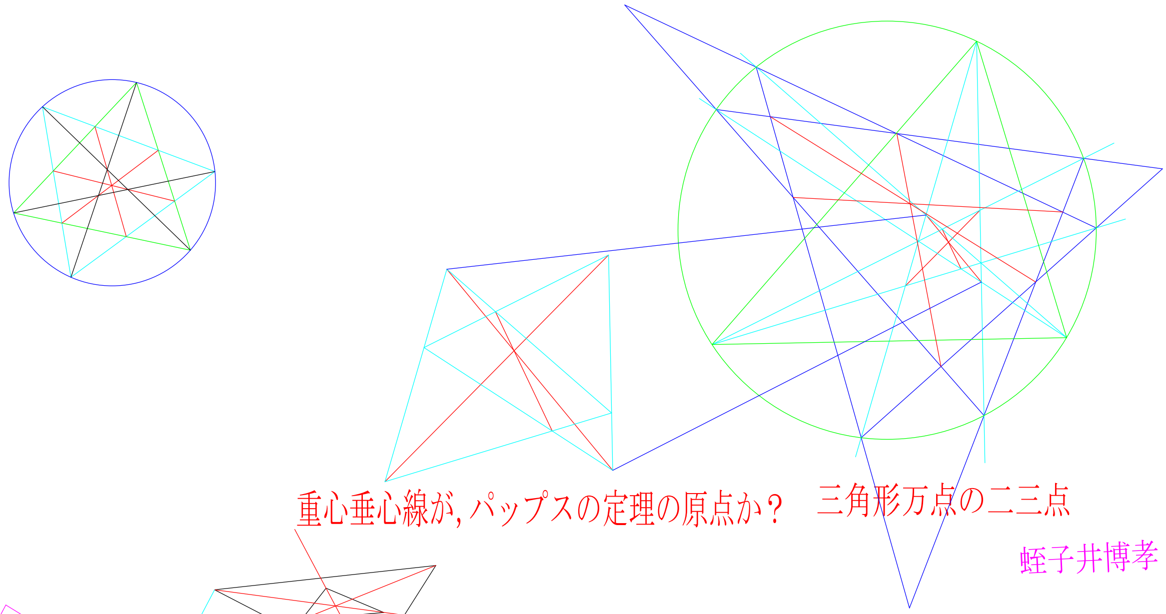
Triangle Overlap 5 types

type 5



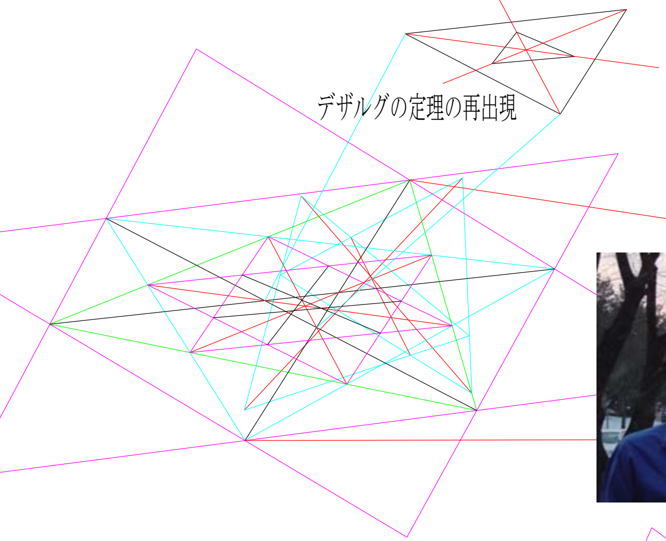
辺三等分線 非共点共点交互無限連鎖

蛭子井博孝



重心垂心線が, パップスの定理の原点か？　三角形万点の二三点

蛭子井博孝



デザルグの定理の再出現

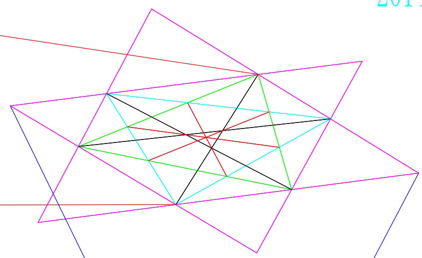
(Theorem s of H.E at Oval Research Center)

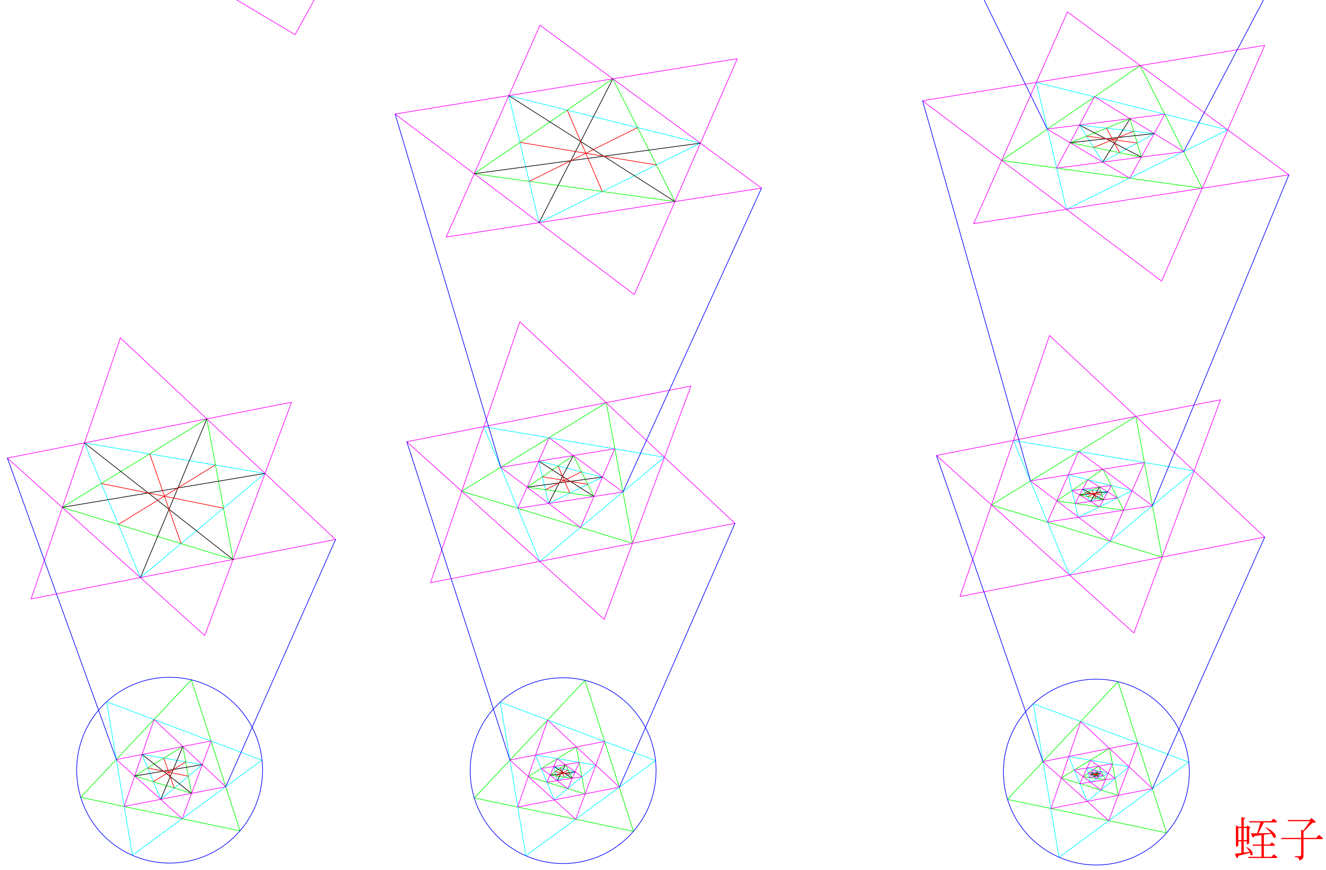
Theatorc

Star 無限PPDB s 連鎖

2014-5-3

2014-5-5 rv

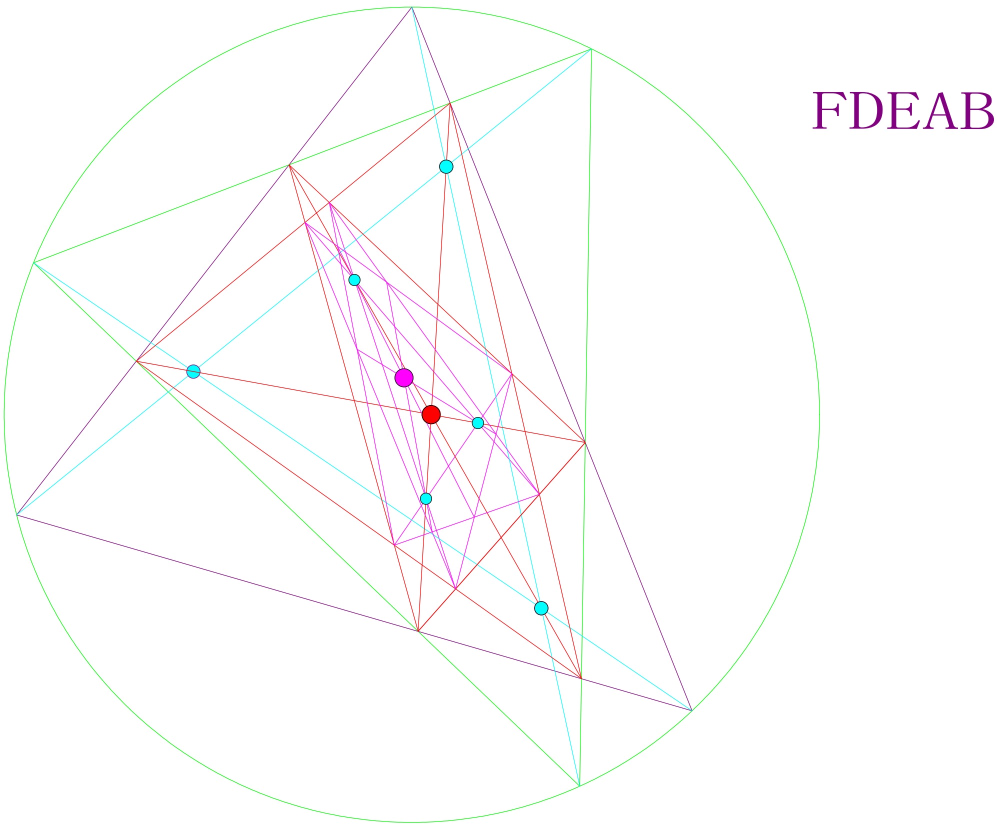


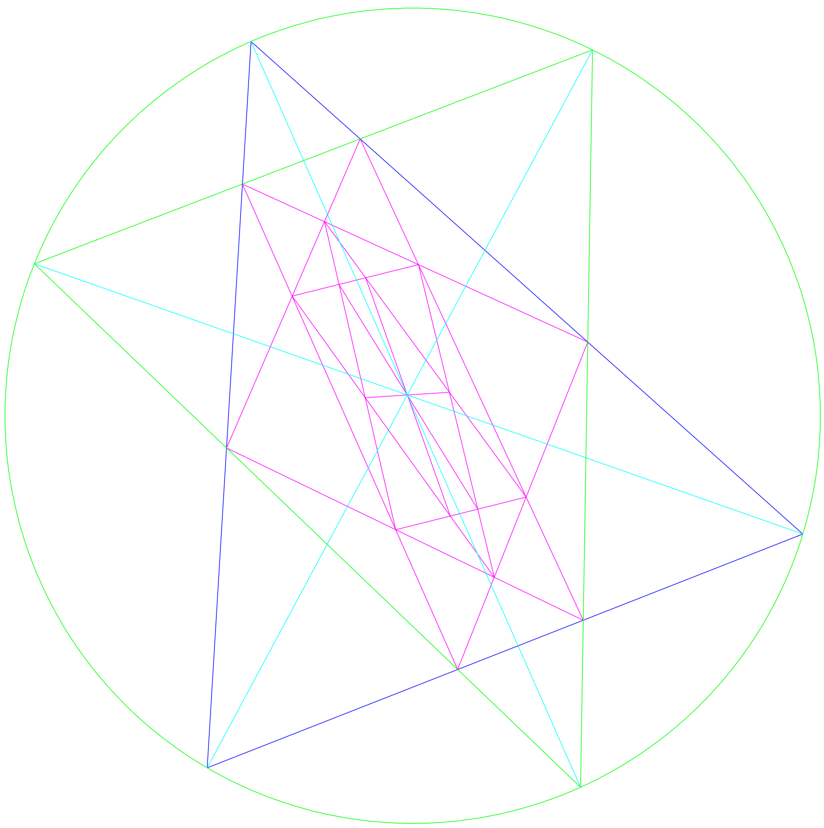


蛭子井博孝

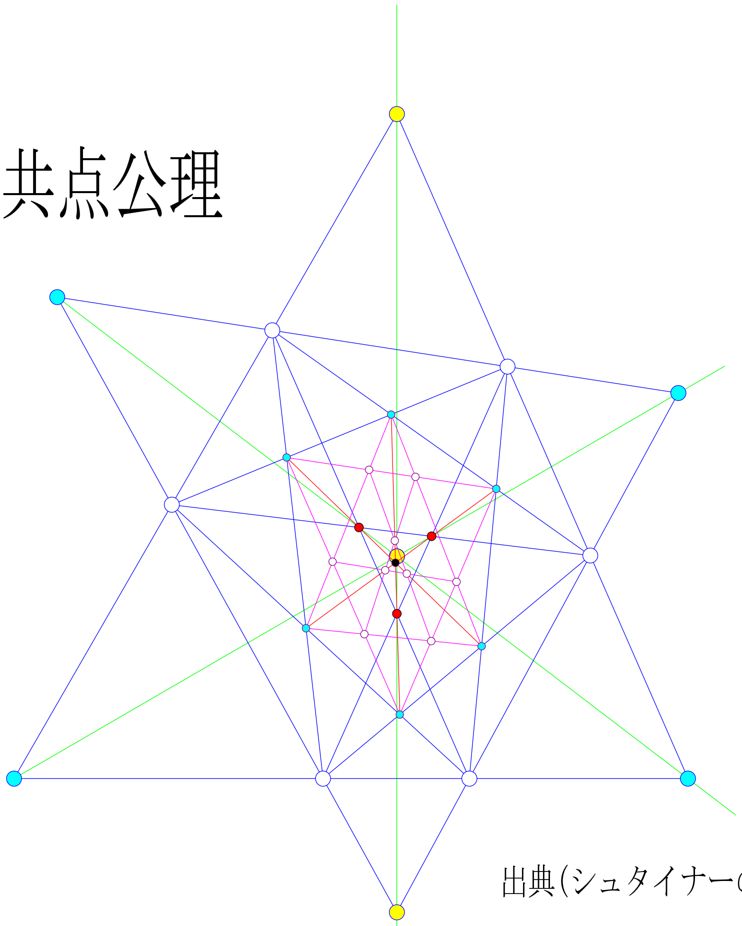
蛭子井博孝発見定理

内内シュタイナー交互連鎖２重星異共点公理



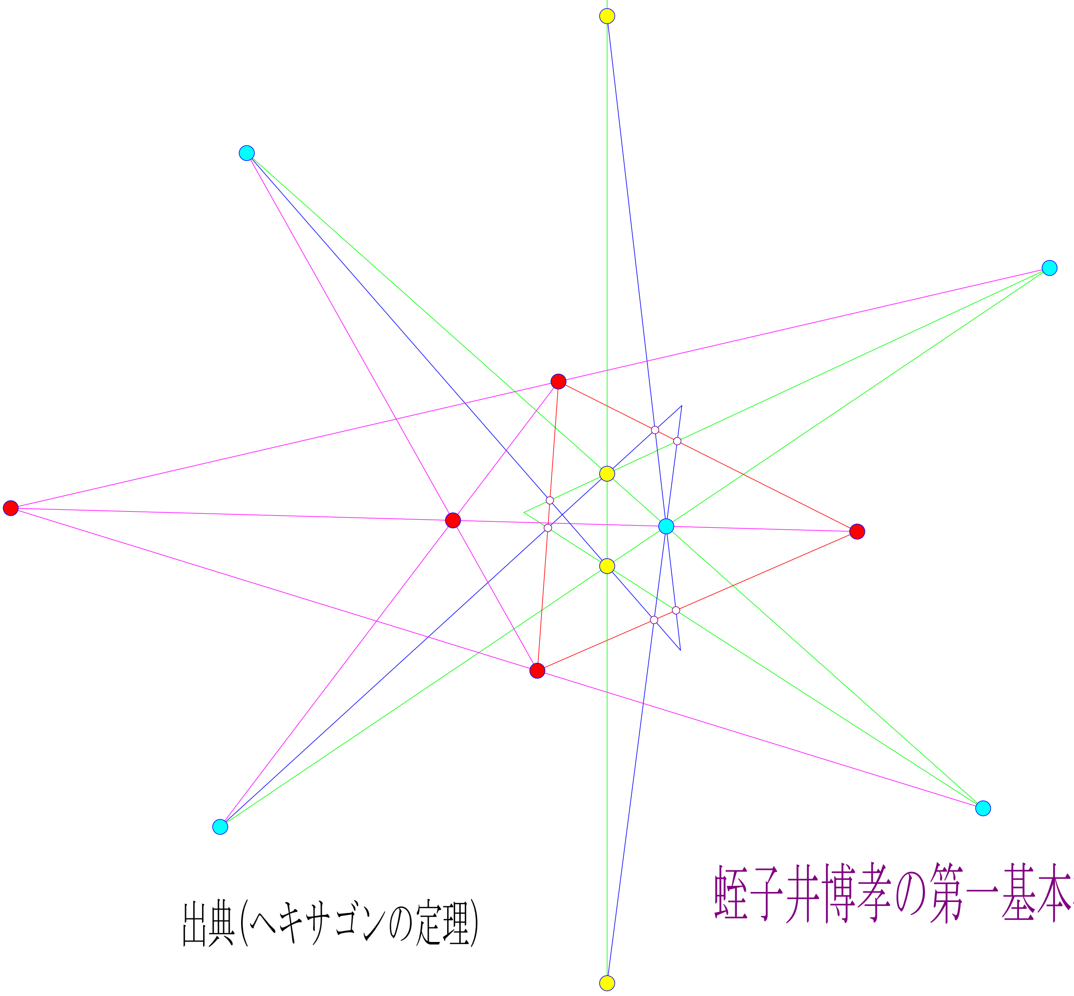


重星の異共点公理



出典(シュタイナーの定理)

蛭子井博孝の第二基本構図

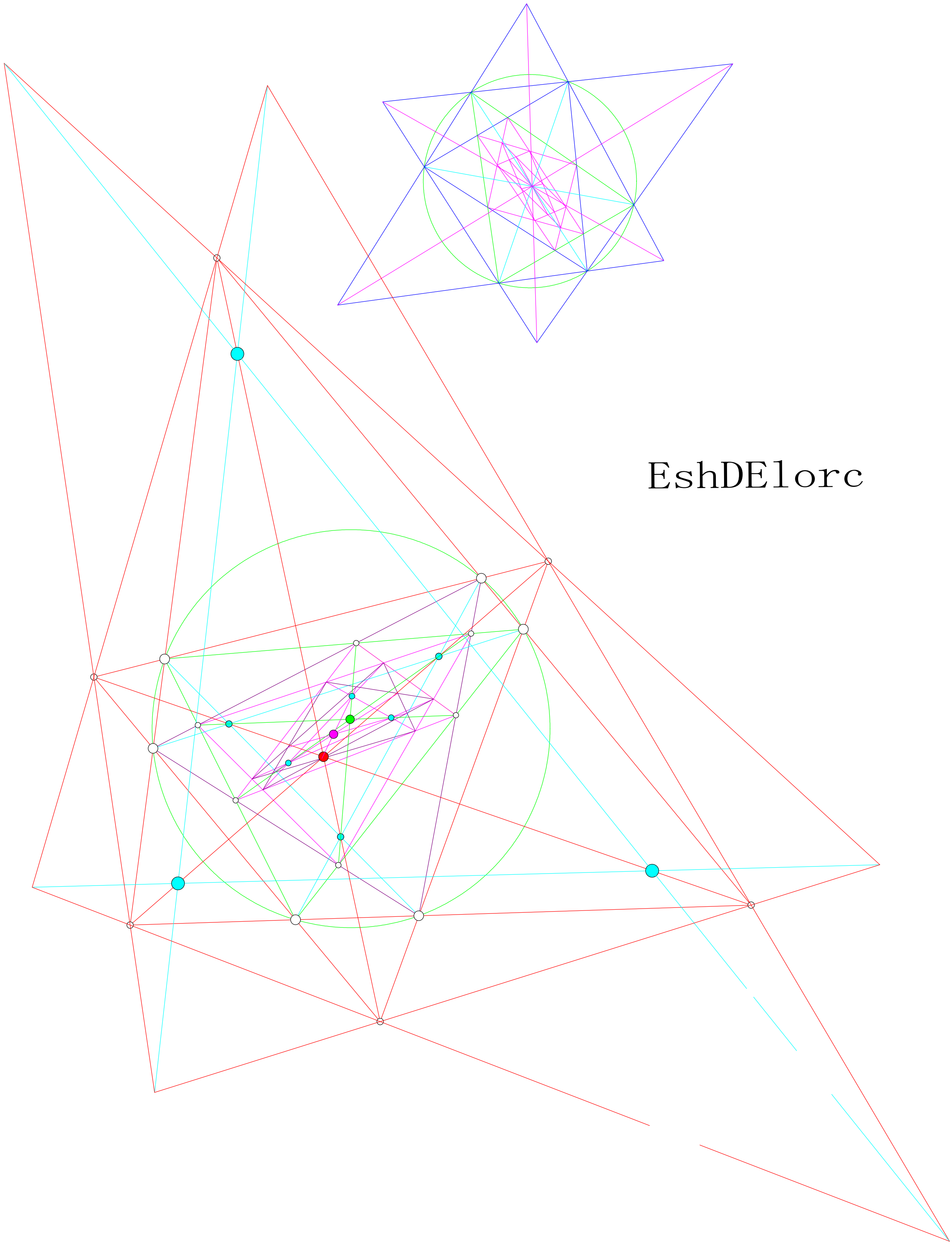


出典(ヘキサゴンの定理)

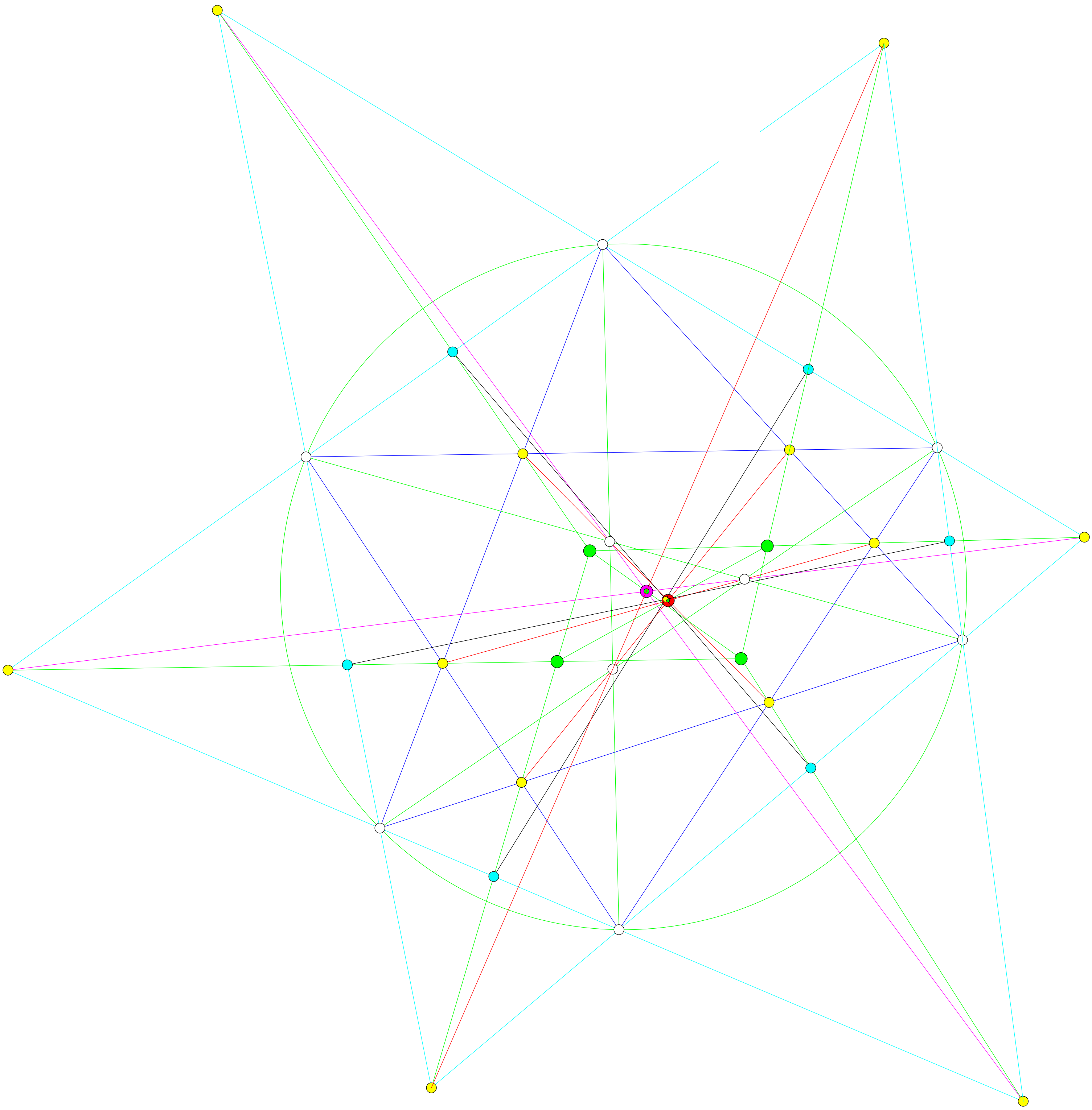
蛭子井博孝の第一基本構図

蛭子井博孝発見定理

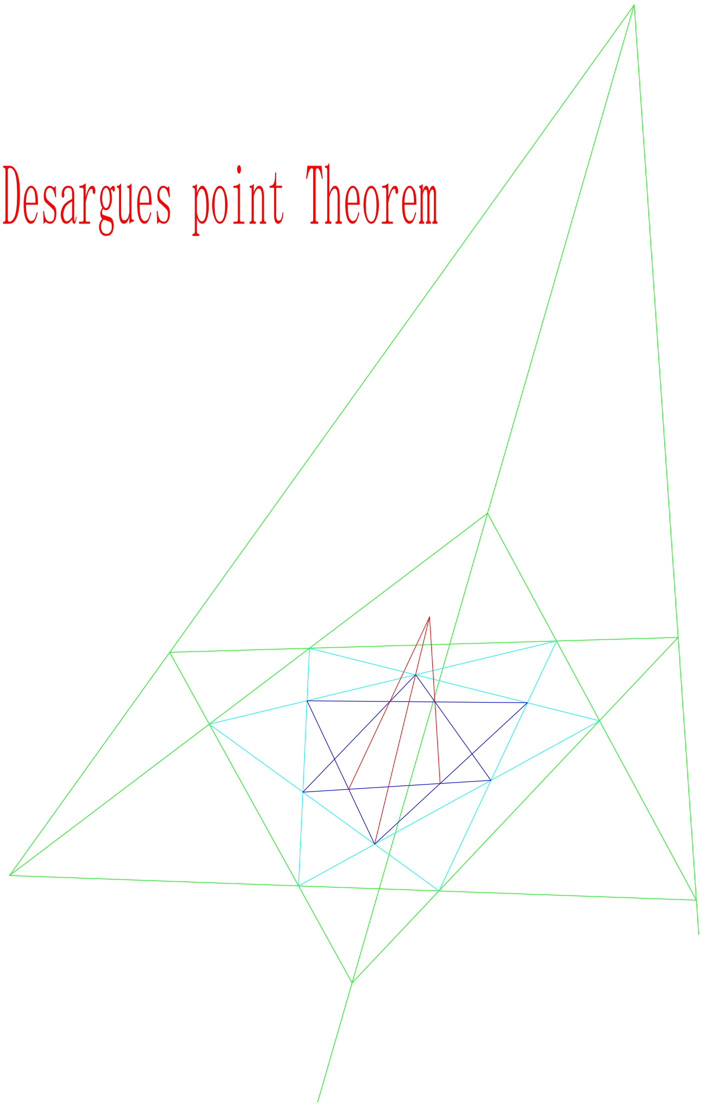
内内外HHE3重星の異共点公理



HHEiostar-Rule



IN IN Desargues point Theorem

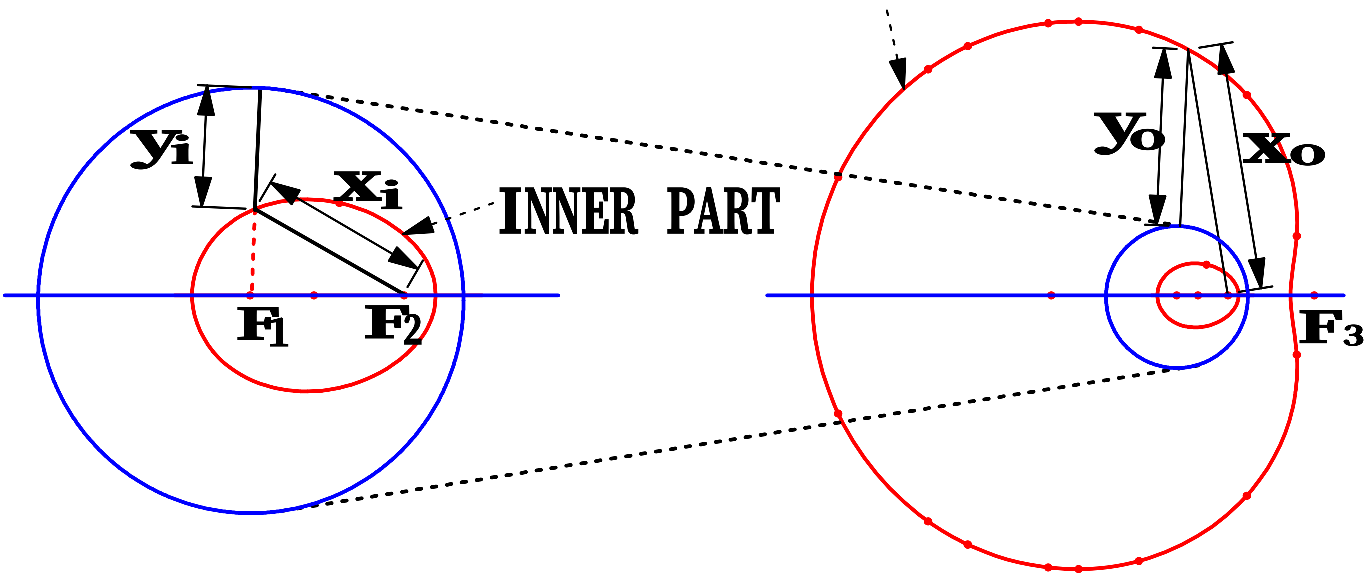


Dova1-002

Inner and Outer Part of the Oval =Dova1

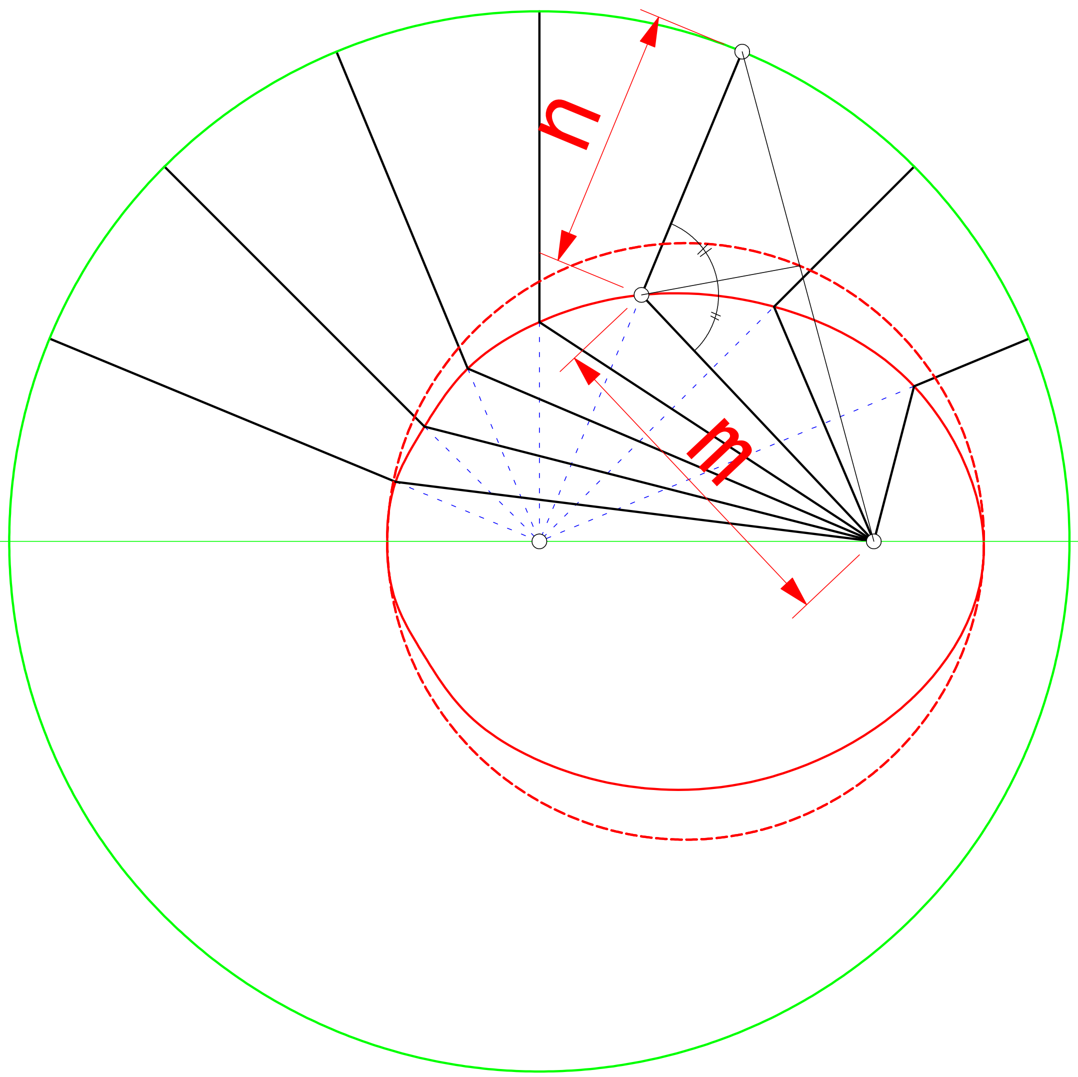
$x_i : y_i = x_o : y_o = m : n$

OUTER PART



$$m r_1 \pm n r_2 = k c$$

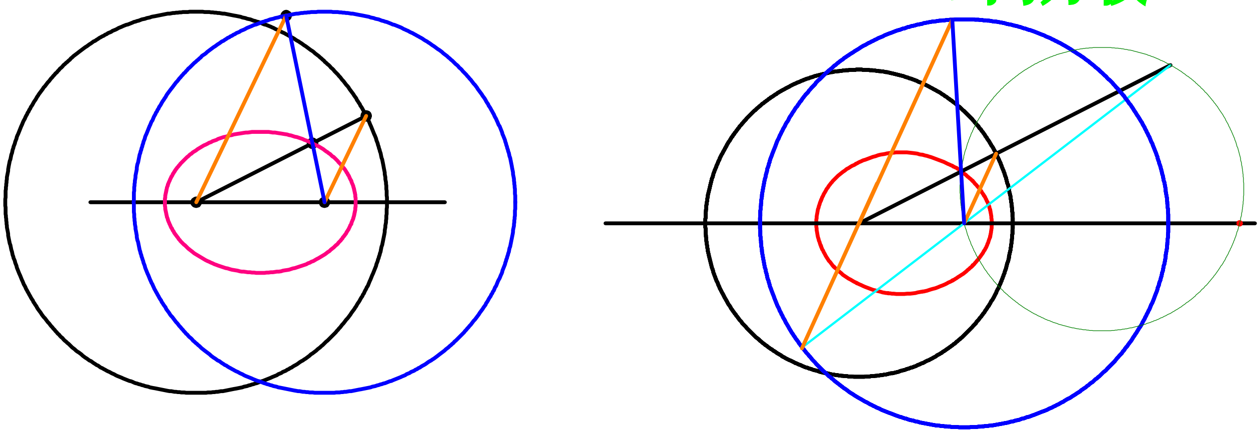
Dovalとは、点と円との距離の比がm：nの曲線



Doval-004

2円（準円）による定義

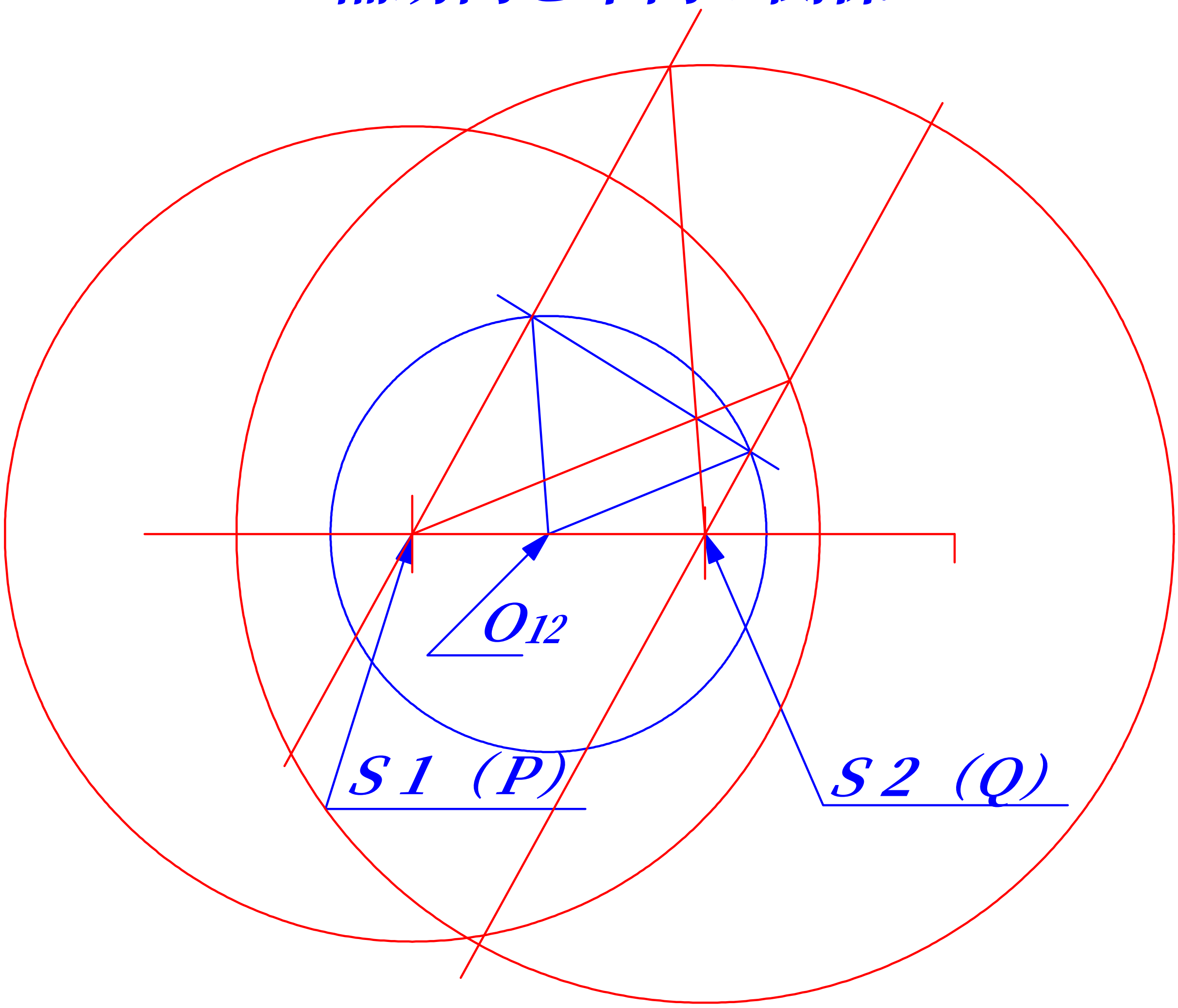
Doval の内分枝



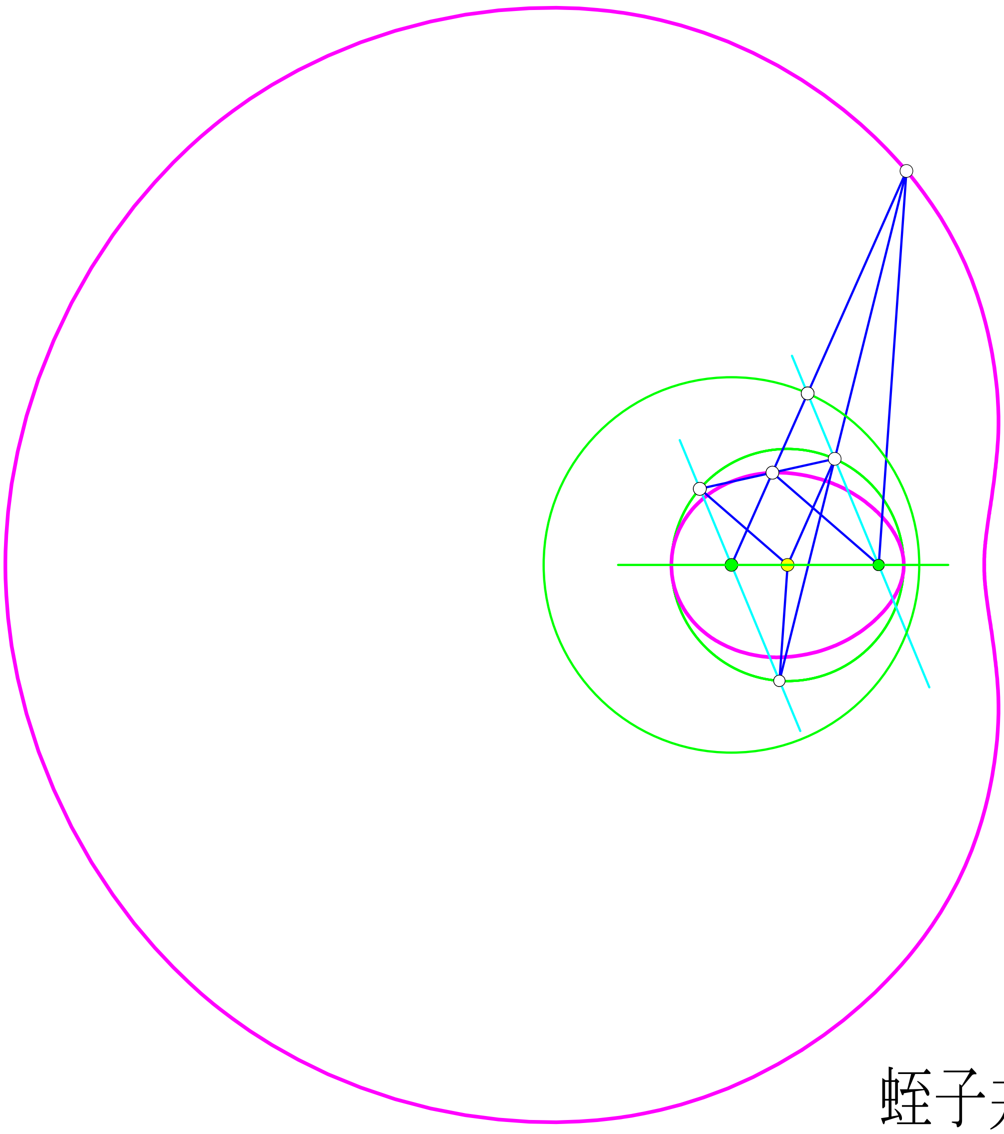
楕円　　卵形線

Doval-005

補助円と準円の関係

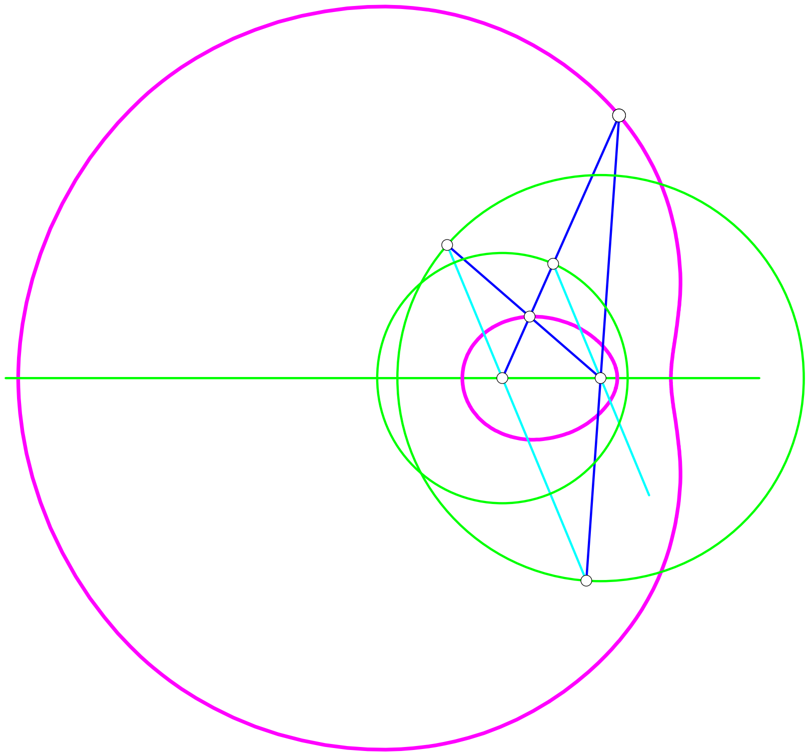


Doval 第1,3定義　1つの準円または1つの補助円より作図

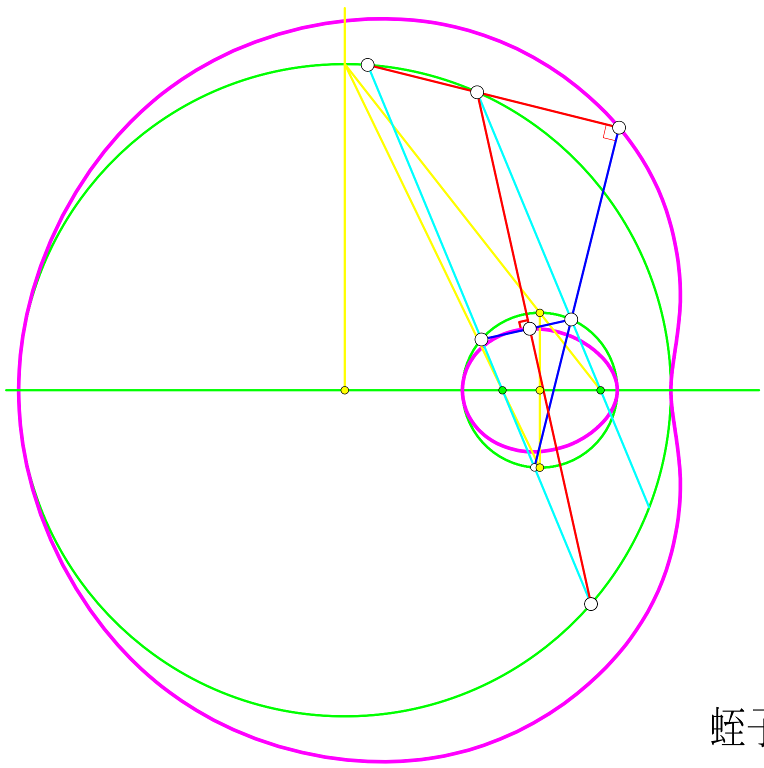


蛭子井博孝

Doval 第二定義　2つの準円より作図



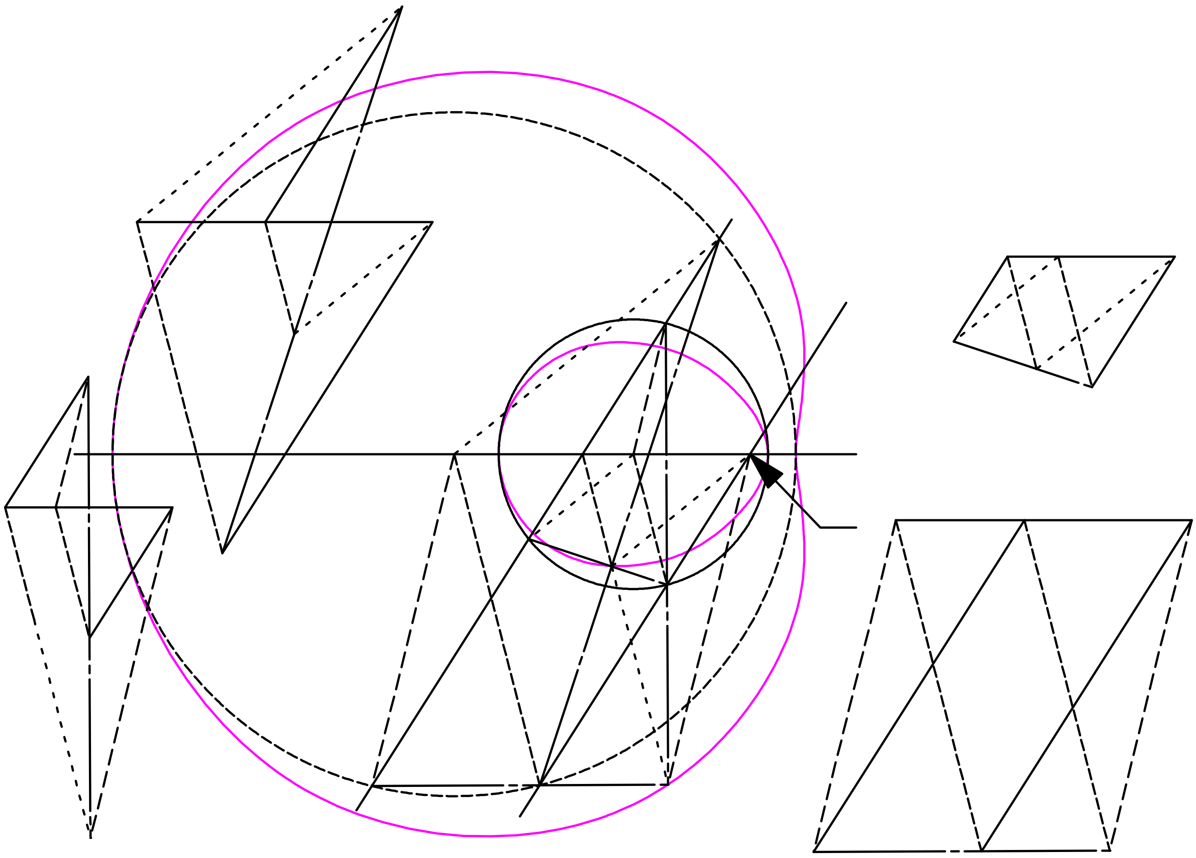
Doval 第四定義　2つの補助円より作図



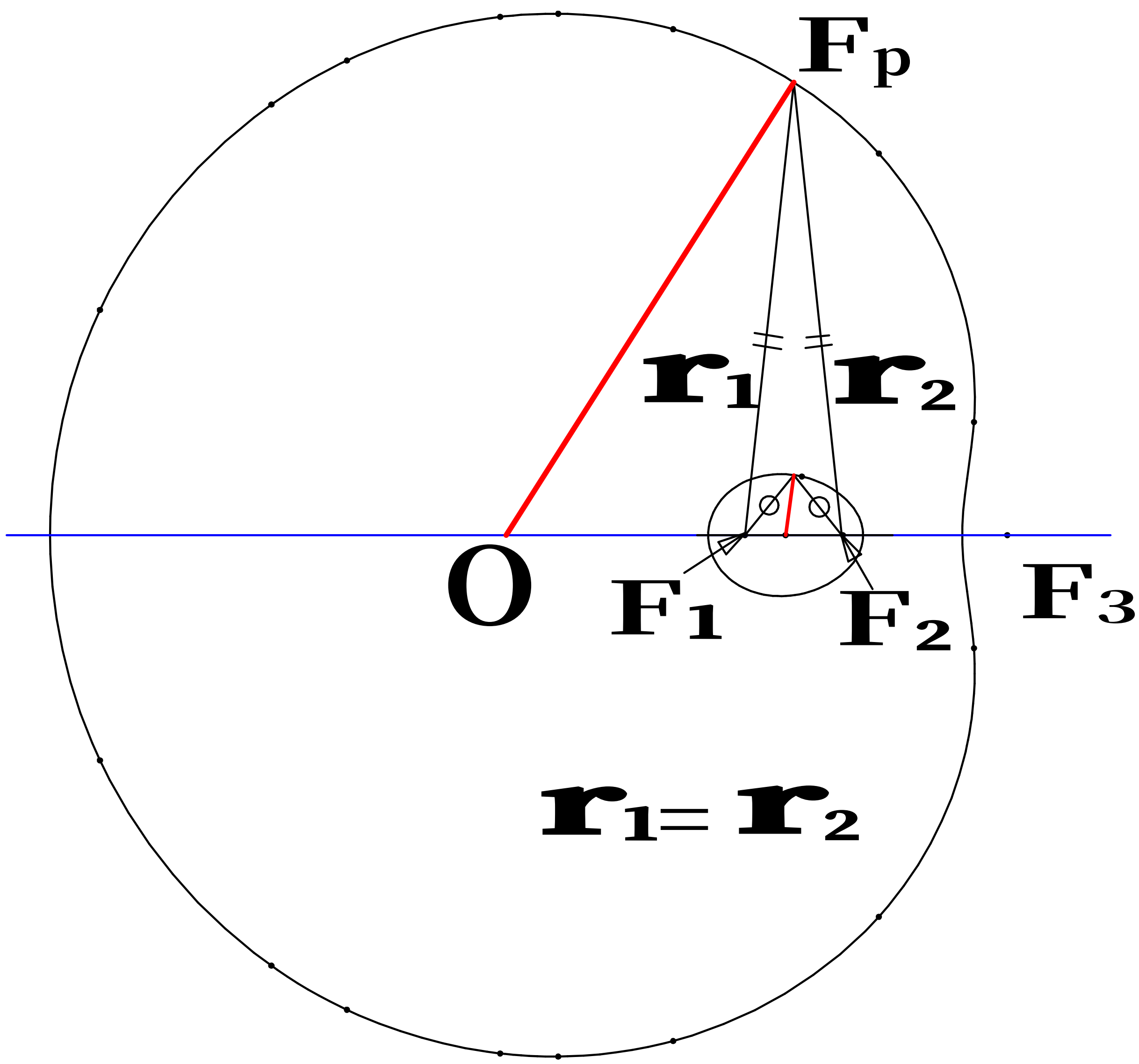
蛭子井博孝

Doval-014

2つの補助円による卵形線

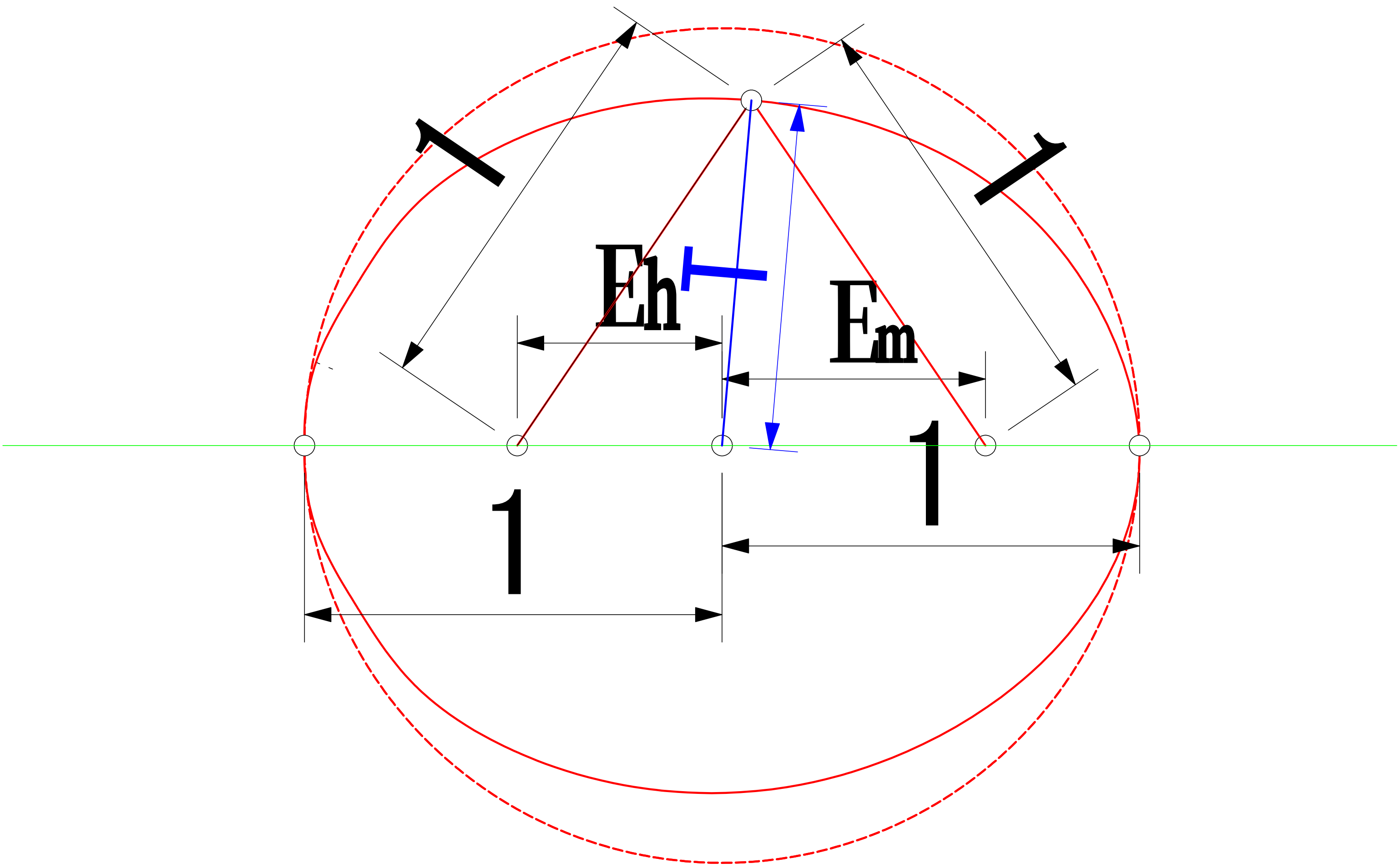


Definition of Outer Major Axis



短軸
(Eccentricity)

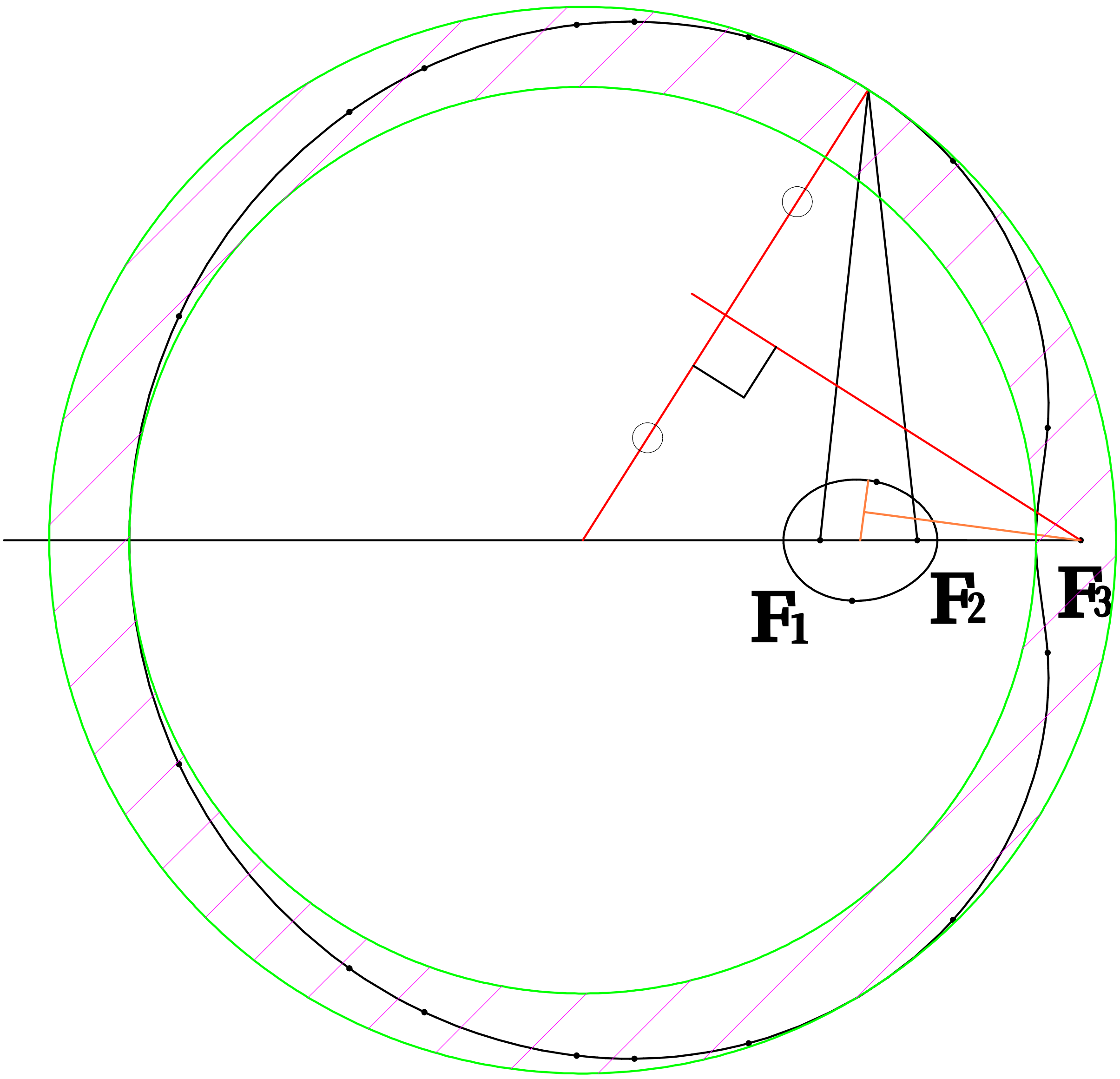
Left
Ｅh：hidari 離心率
Ｅm：migi 離心率
Right

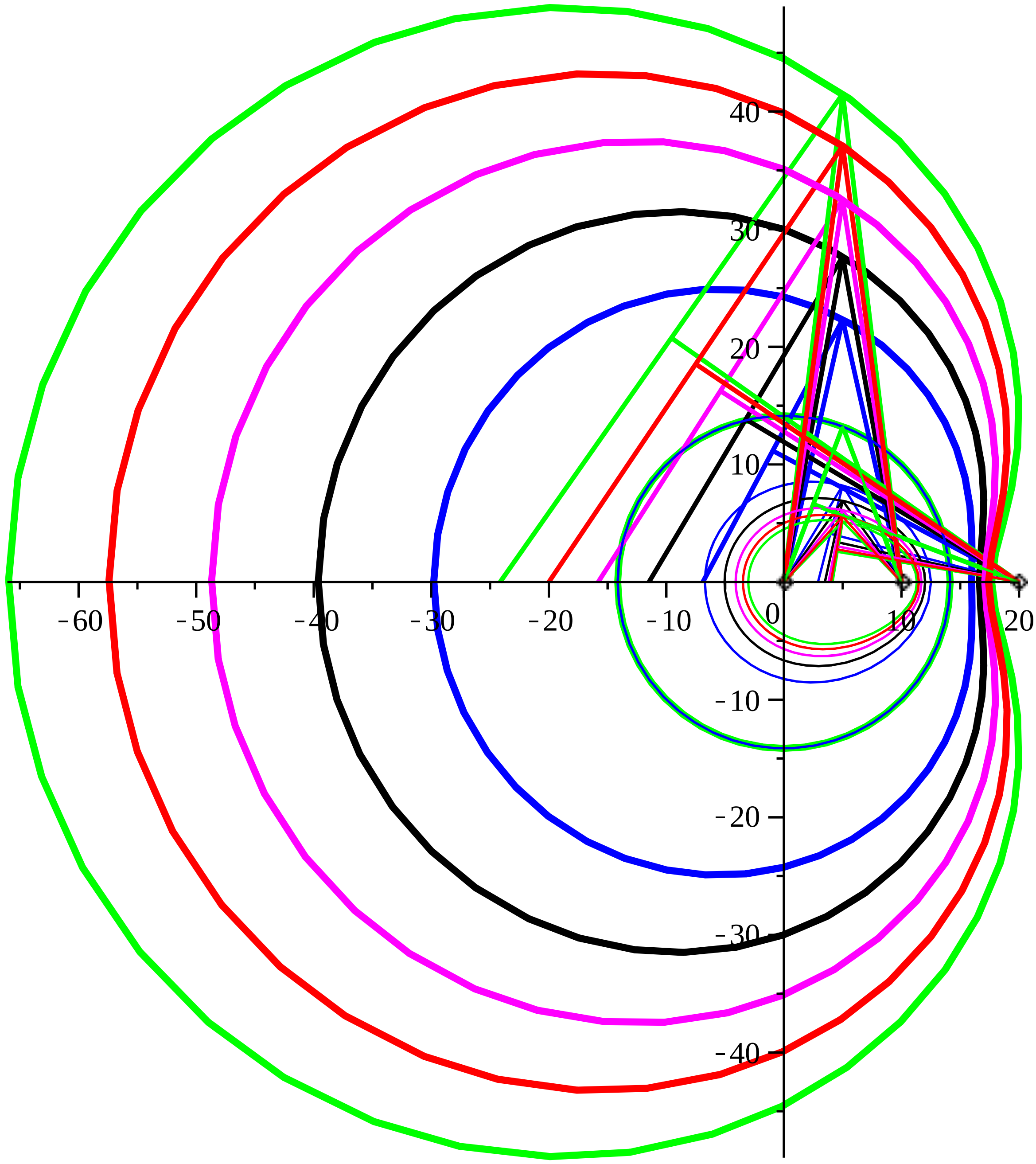


T＝√1－Eh*Em

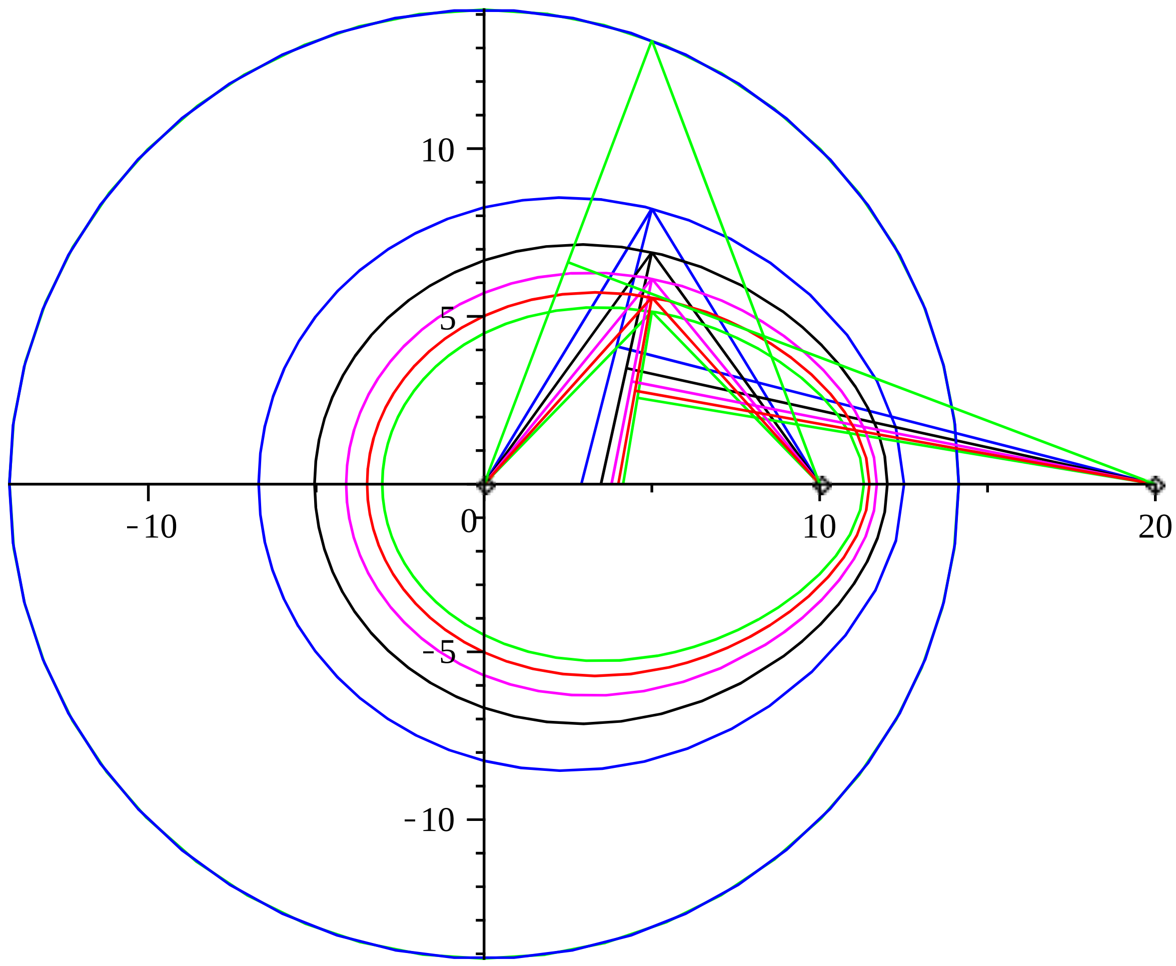
Dova1-013

Perpendicular Bisector of Outer Major Axis Passes F3

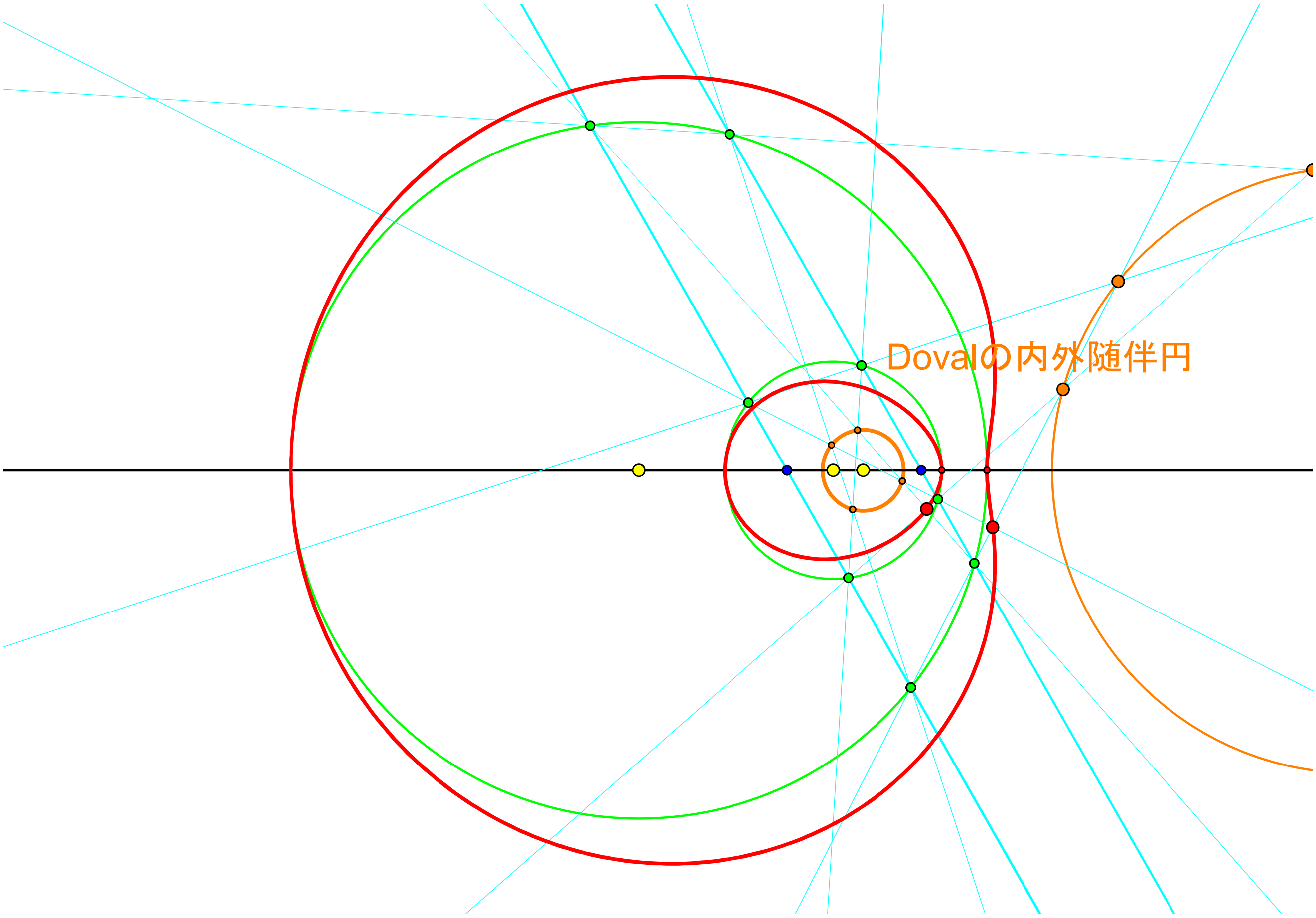





```
> display({F1,F2,F3,C1,seq(xlinein||i,i=1..nn),seq(xovalin||i,i=1..
  nn)});
```

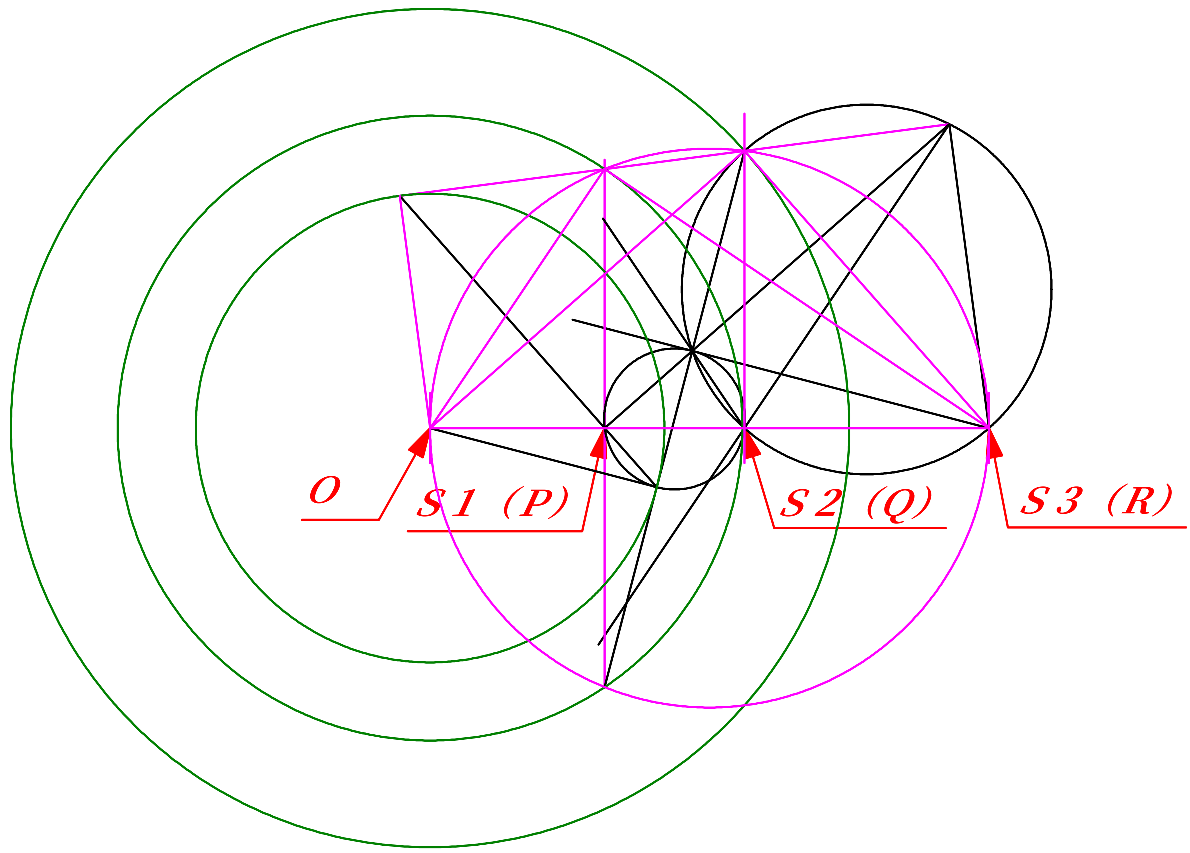

10
5
-5
-10
-10
0
10
20

蛭子井博孝 - 10 ９月 2017



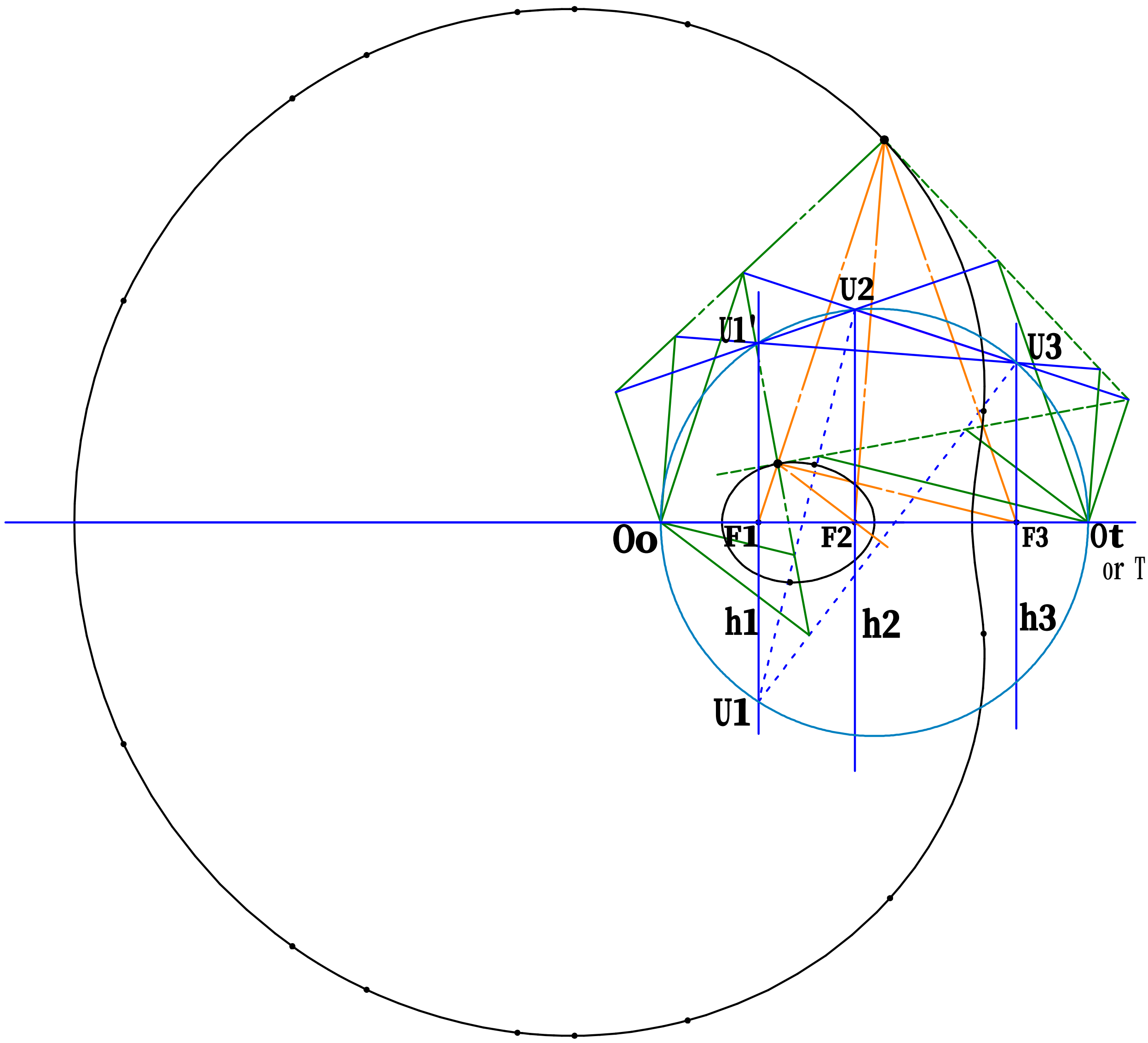
Doval-006

直線上の4点による卵形線（Ｄｏｖａｌ）の定義



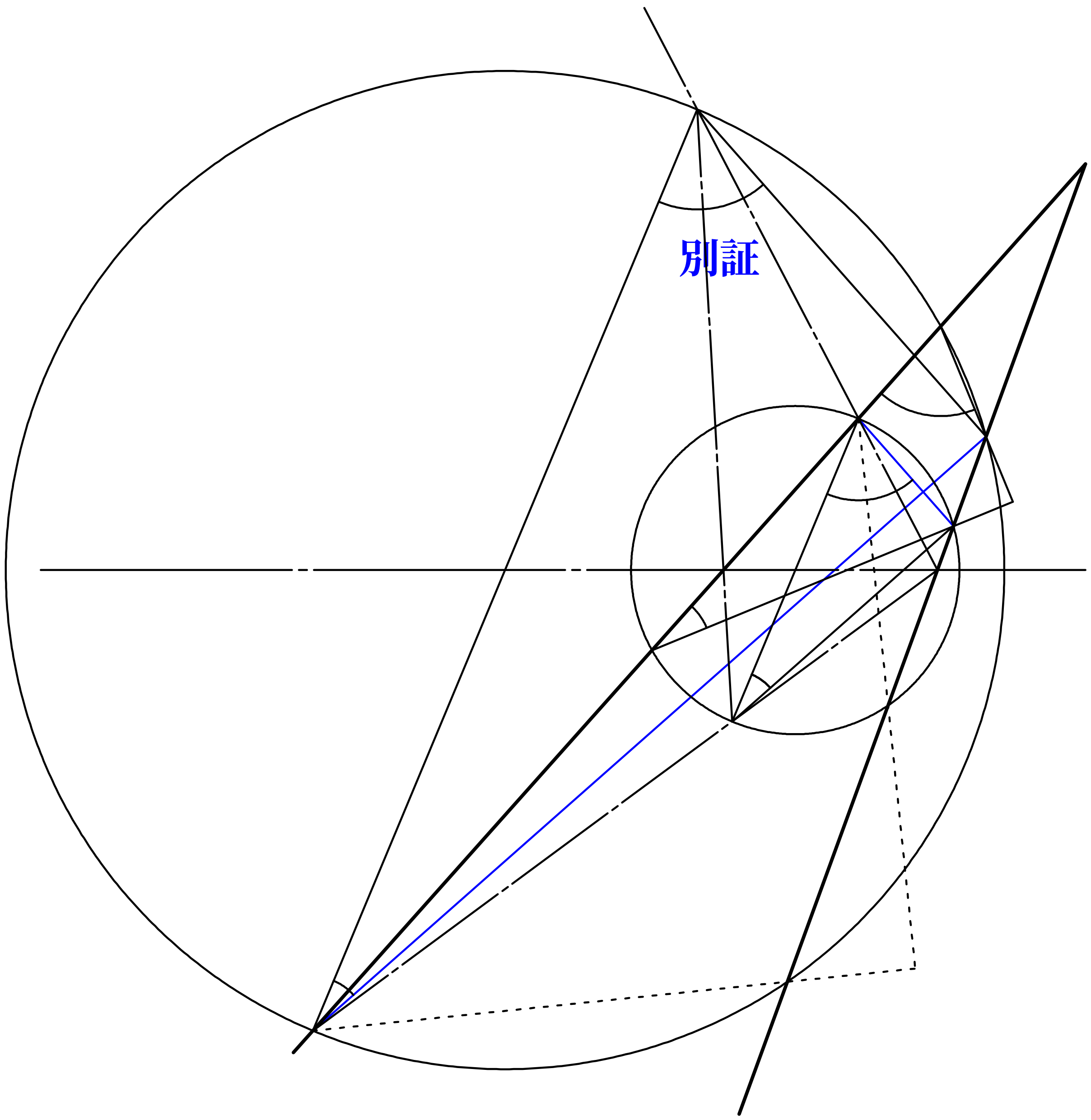
Doval-007

Def of the Oval by Orthopole and Simson Line



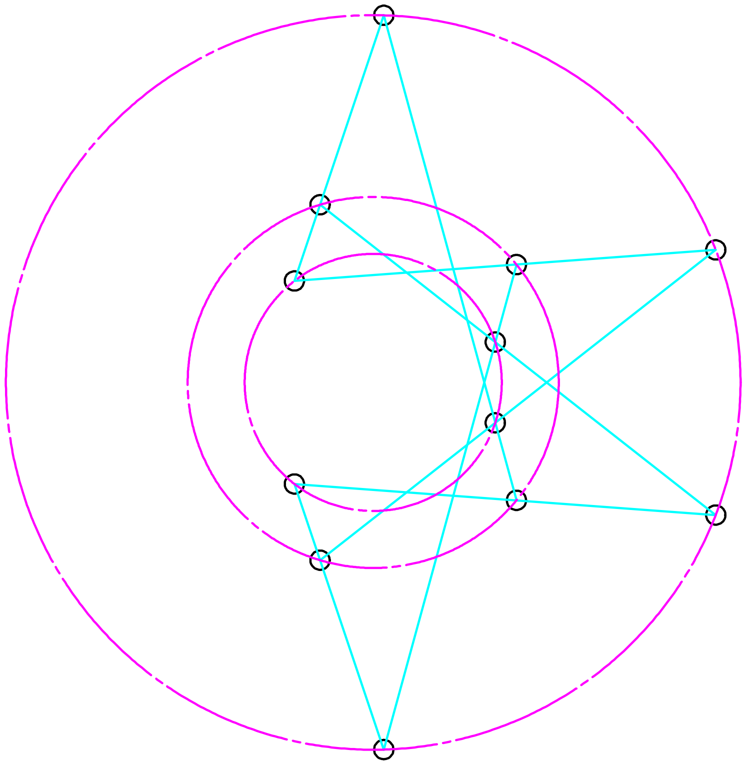
Doval-008

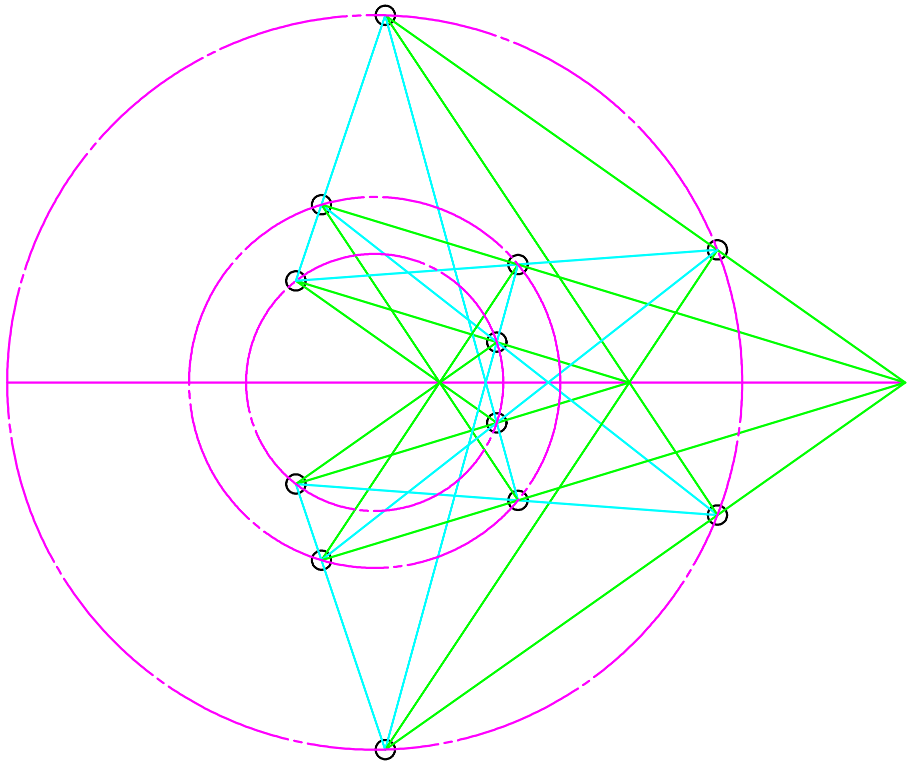
2補助円のDoval直交定理の証明図



Doval の　等距離円の構図から作成
コンフィギュラチオン

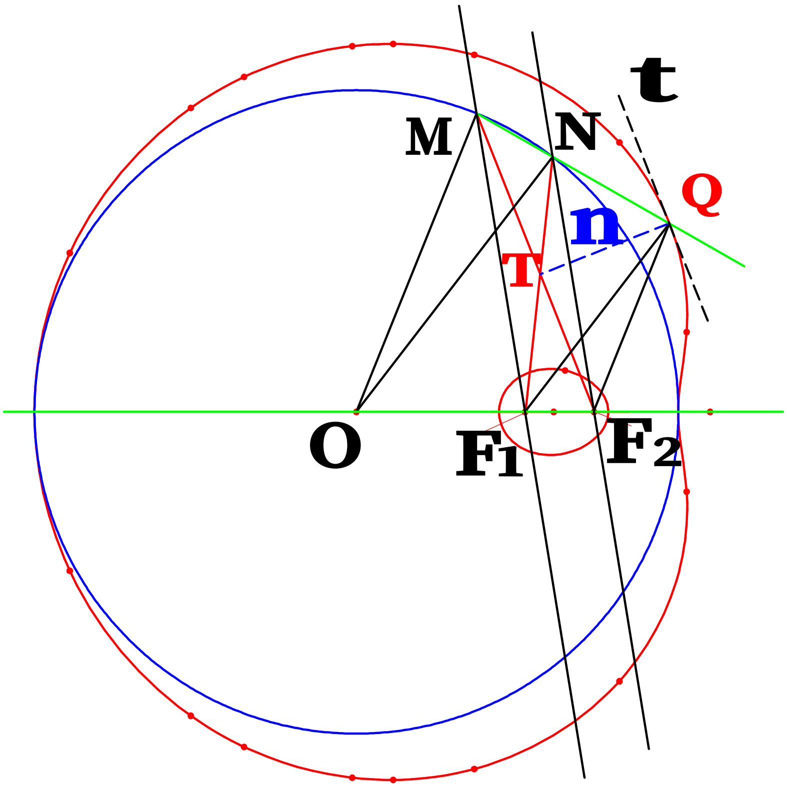
Doval-010



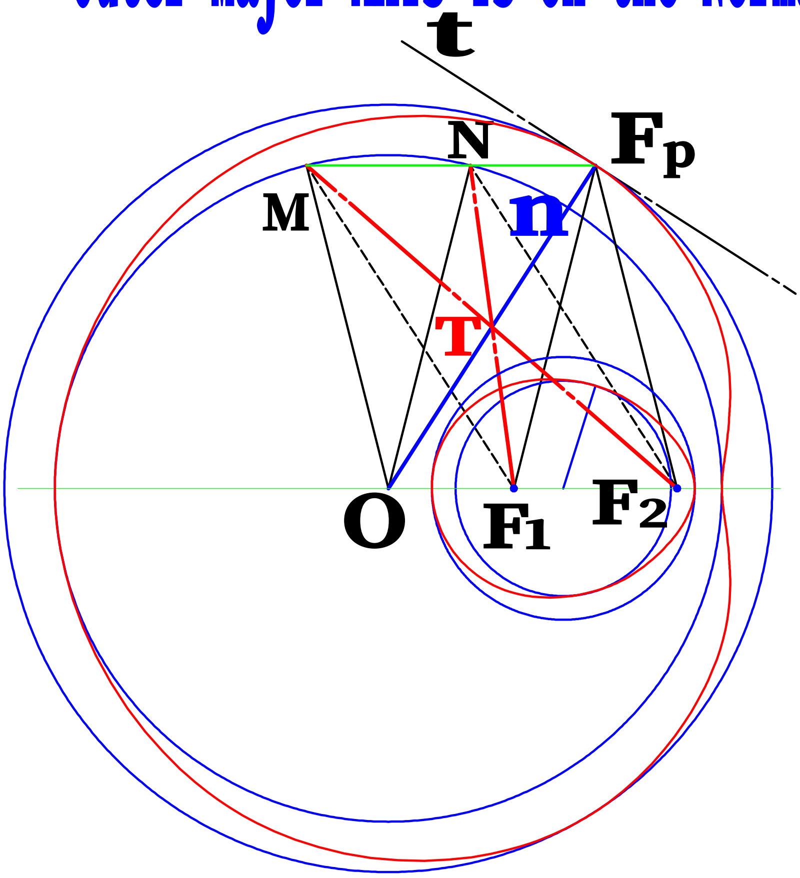


Dova1-011

Normal of Outer Part



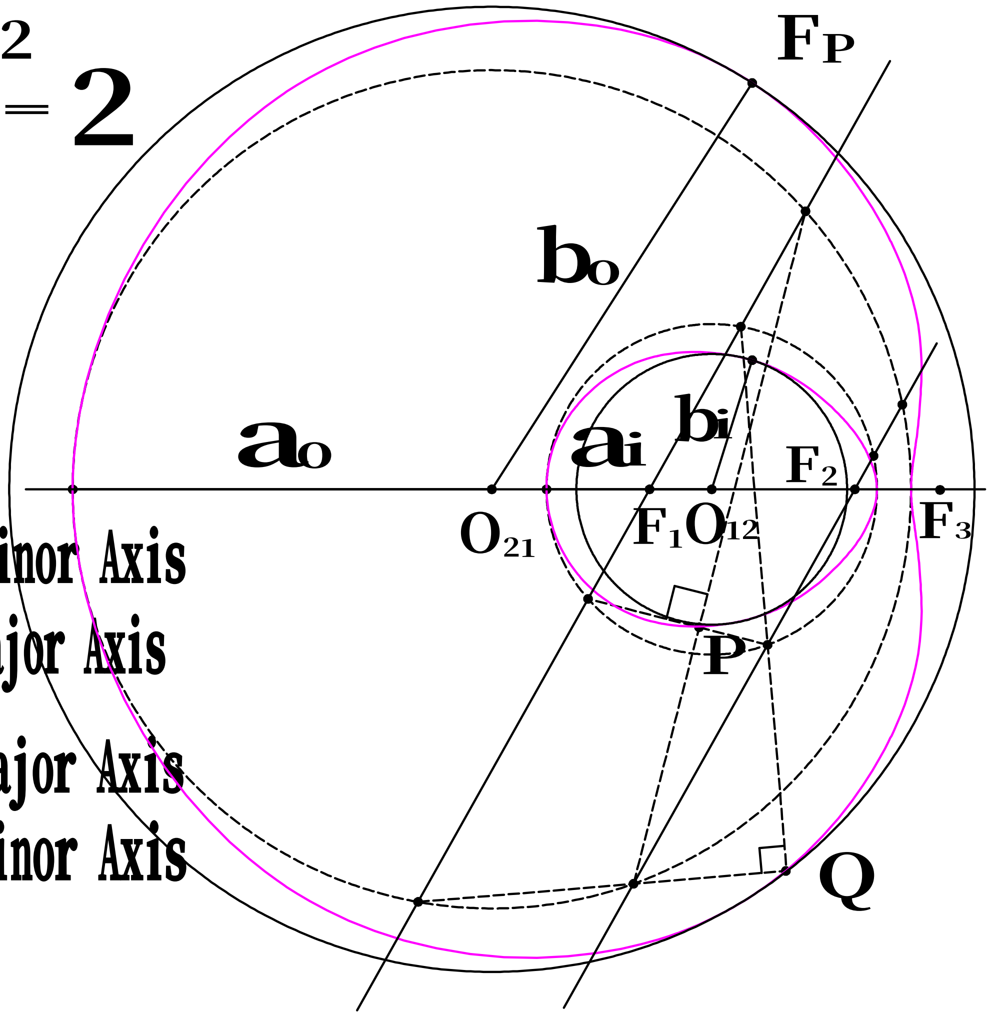
Outer Major Axis is on the Normal



Doval-012

Four Axes of the Oval

$$\left(\frac{b_i}{a_i}\right)^2+\left(\frac{b_o}{a_o}\right)^2=2$$



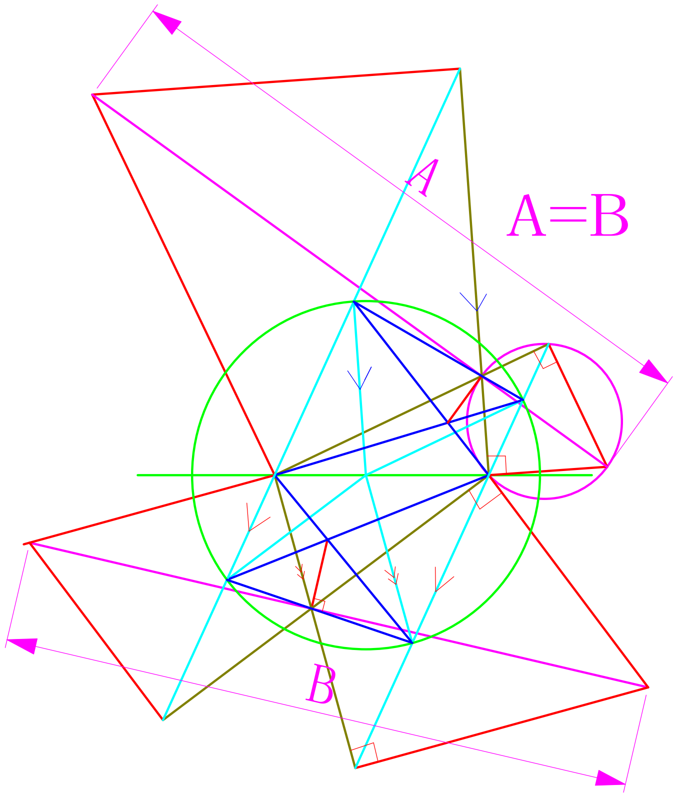
a_o : Outer Minor Axis

b_o : Outer Major Axis

a_i : Inner Major Axis

b_i : Inner Minor Axis

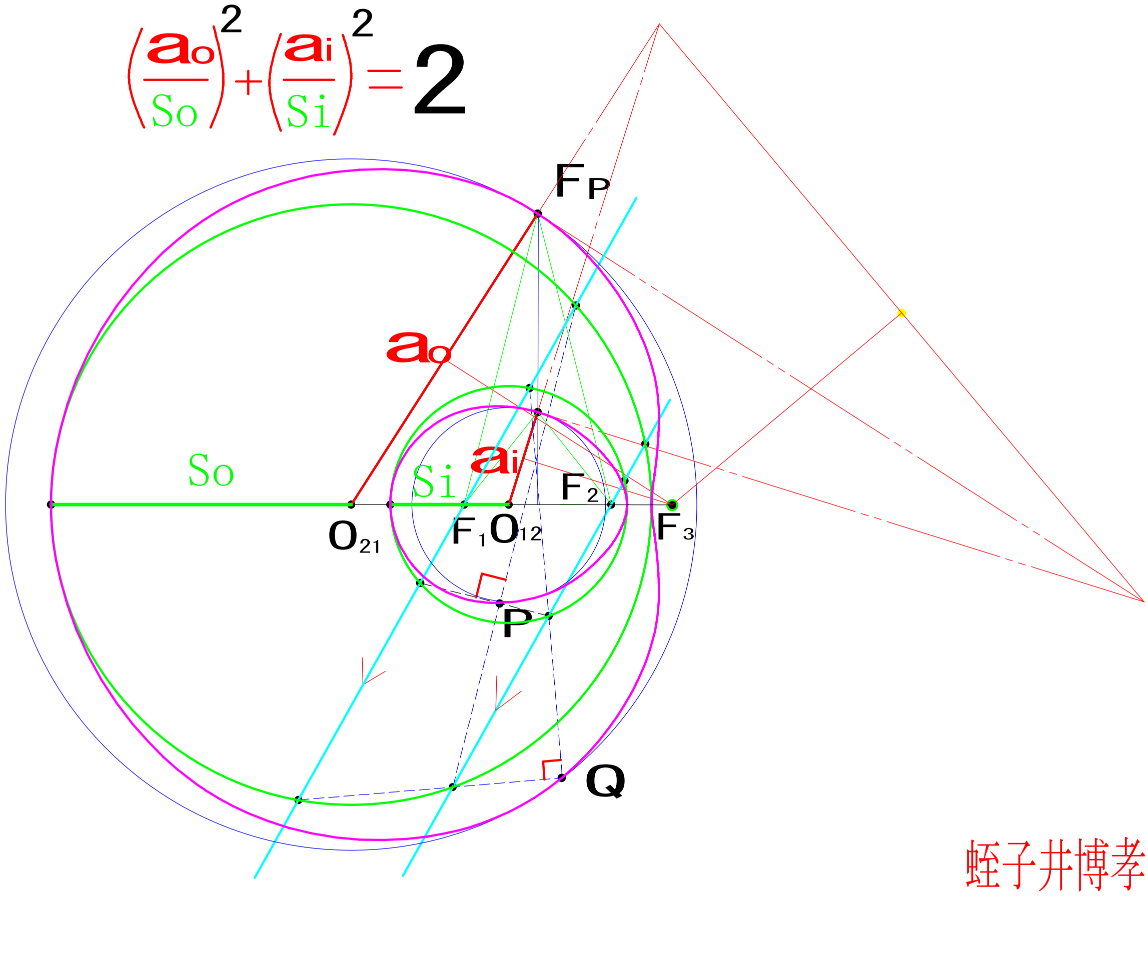
Doval 2題



Doval不変式

2015-5-5

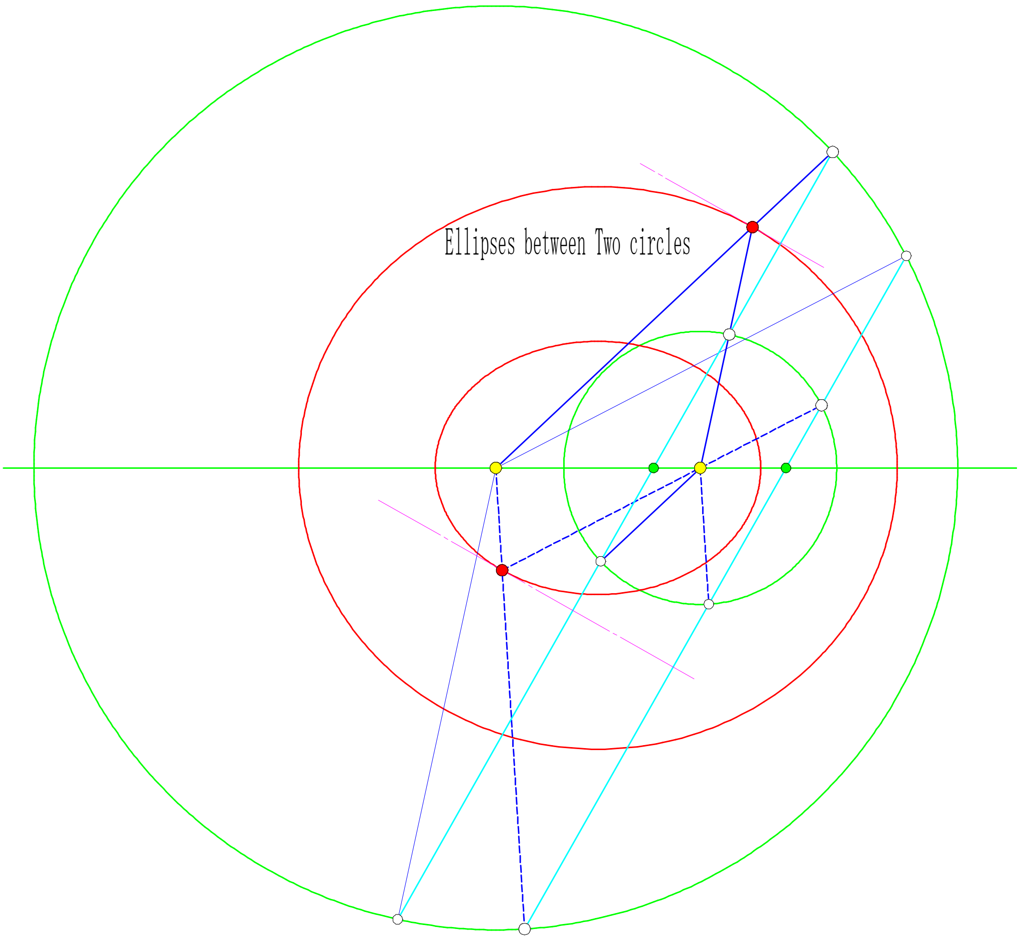
$$\left(\frac{a_o}{So}\right)^2+\left(\frac{a_i}{Si}\right)^2=2$$



蛭子井博孝

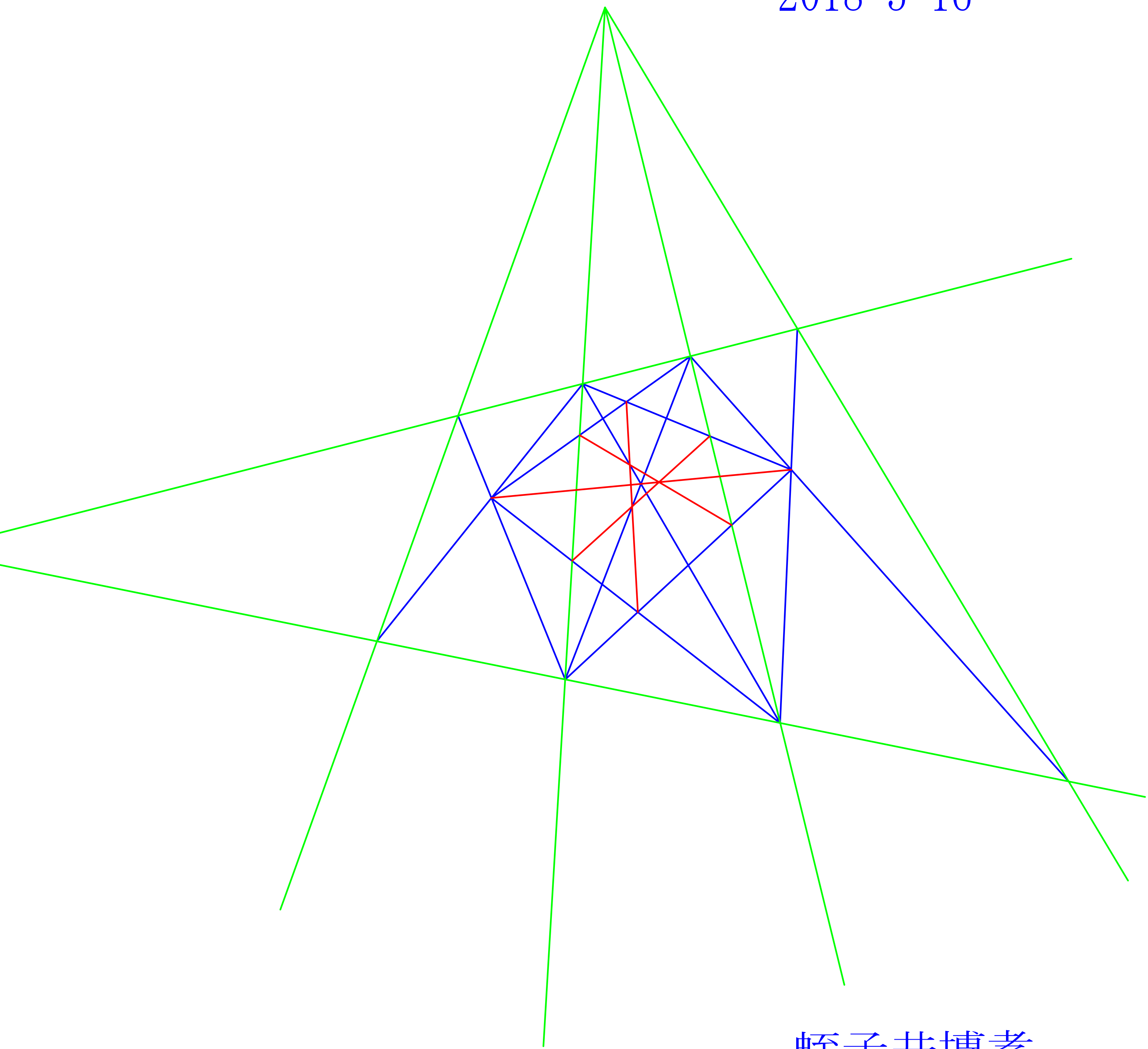
Ellipses between Two circles

made by Paralell lines which pass through Simulality centers of the circles



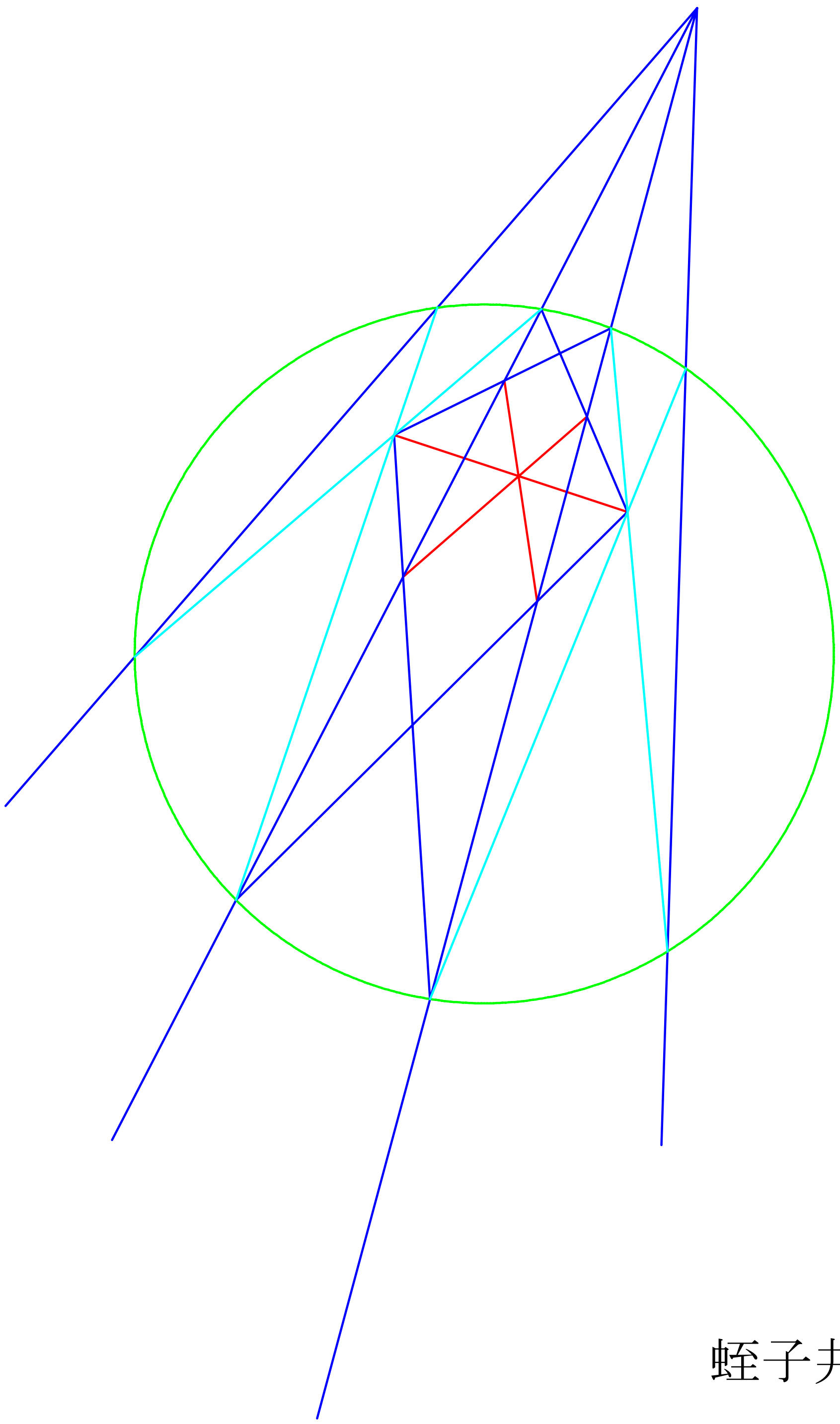
2円の相似中心を通る平行線によって証明される2円から等距離にある点の軌跡が楕円であること

2018-5-16



蛭子井博孝

2018-5-19



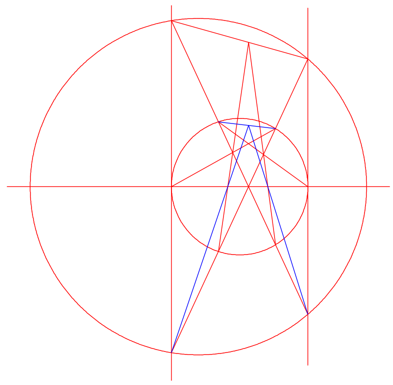
蛭子井博孝

あとがき

幾何数学の小径の編集は、その過程の作成証拠も残しておくことにした。本来、編集とは、気に入らない部分をさっさとけし、きれいにすればいいのだと思うが、文字をつけた時点のその書のその場所の言い分があるのを、なかなか自由に取り消せないのを実感。ここに、本作りの難しさを感じる。ワープロソフトや図面ソフト PDF ソフトが、著作、編集、印刷において、次第に、便利になり,作者の言語固有性が、生き生きし出したが、まだ編集作業の難しさは変わらない。とにかく、あとがきを再著した。これで、ほんの形になる。ありがたい。

蛭子井博孝　　TREW

幾何数学の小径



連絡先　090 ― 4800 ― 9285
蛭子井博孝
http://gamumon87.com/
~~http://hirotakaebisui.com/~~
~~http://geomathe.com/~~

geoMathe Diary 61th

HOPE and PRAY　No.1

Ebisui Hirotaka

happiness

by M.I

Contents

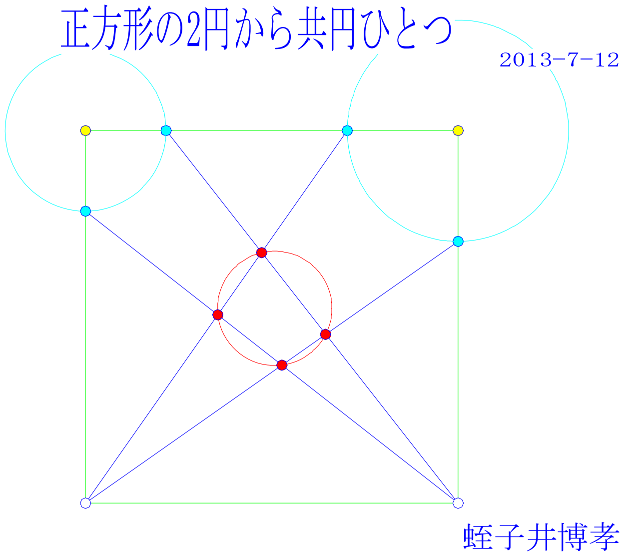
7-10 geoMathe XXTH を再会
思うように集中できず 12 日の締め切り日になった。2，が　やっとできた。一題で北。もう一題は、古いのを再作図した.正方形の不思議さ味わってほしい。マリアさんから、エネルギッシュなDOC　happiness をもらい、私は、1 行で済ませた。
Doval もっと時間を掛け説明したいが、この 3D に興味を持つ方は、http://hoval.blogzine.jp/hoval/ の第一論文をお読みいただきたい。(H.E)

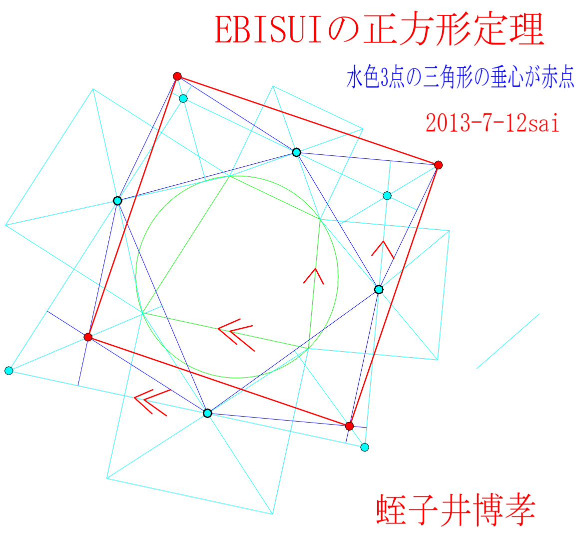
夏来たる、暑さの中の、正方形
一歩前　進むｼﾞｵﾏｽ　夏日記　　　　微水弧山

卵形線研究センター

http://hoval.blogzine.jp/
http://eh85.blogzine.jp/

2　on　Square


正方形の2円から共円ひとつ
2013-7-12
蛭子井博孝


EBISUIの正方形定理
水色3点の三角形の垂心が赤点
2013-7-12sai
蛭子井博孝

３　NUMTable　３数の和と積の和がｘ＾ｘとなる数

```
> # HI-NUM by H.E:
> C := 0 :
> for a from 0 to 1 do for b from 3 to 3 do for e from b to 5 do for h from 2 to 8 do for s
    from 2 to 19 do for t from s to 20 do for u from t to 21 do  ST := a + s + t + u + u·s·t :
    if ST = h^e then C := C + 1 : print( [Add(a) + [s] + {t} + {[u]} + [s]·{t}·{[u]}
    = [h]^e ]) fi :od:od:od:od:od:od :od:
          [Add(0) + [2] + {2} + {[12]} + [2] {2} {[12]} = [4]^3]
          [Add(0) + [2] + {6} + {[9]} + [2] {6} {[9]} = [5]^3]
          [Add(0) + [2] + {5} + {[19]} + [2] {5} {[19]} = [6]^3]
          [Add(0) + [2] + {6} + {[16]} + [2] {6} {[16]} = [6]^3]
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          [Add(0) + [3] + {5} + {[13]} + [3] {5} {[13]} = [6]^3]
          [Add(0) + [3] + {6} + {[13]} + [3] {6} {[13]} = [4]^4]
          [Add(0) + [2] + {14} + {[21]} + [2] {14} {[21]} = [5]^4]
          [Add(0) + [7] + {9} + {[20]} + [7] {9} {[20]} = [6]^4]
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          [Add(0) + [11] + {14} + {[20]} + [11] {14} {[20]} = [5]^5]
          [Add(1) + [2] + {3} + {[3]} + [2] {3} {[3]} = [3]^3]
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          [Add(1) + [2] + {6} + {[18]} + [2] {6} {[18]} = [3]^5]
          [Add(1) + [9] + {18} + {[19]} + [9] {18} {[19]} = [5]^5]          (1)
>
```
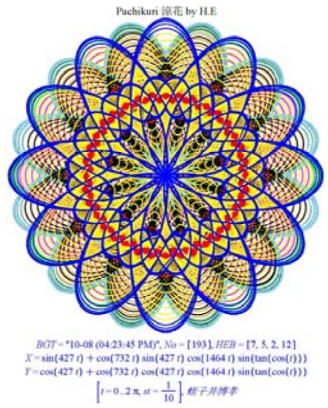
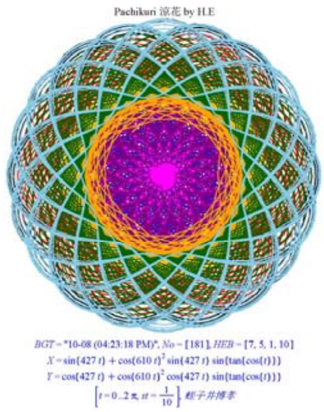

4 3D by M.I　　2D by H.E





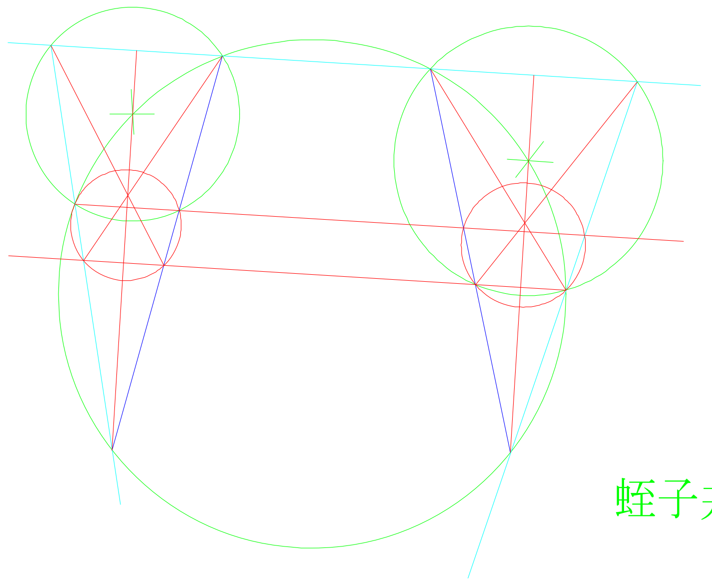
5 Point Line Circle Geometry　　HI-335

h-10-7 の 平行定理

HI-335-2

2008-10-7(火)

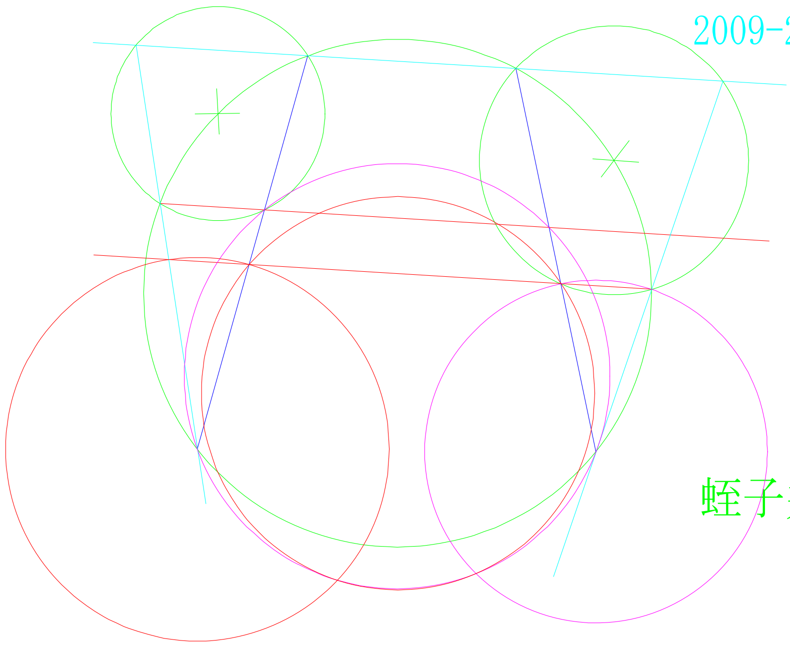
6



蛭子井博孝

小さな結論線、でも少し進んだ。 2013-7-12

2009-2-25



蛭子井博孝

On Happiness

Happiness does not continue for a long time.So, It is important for all.Ithink

by Hirotaka Ebisu

In Italiano by Maria Intagliata

La felicità

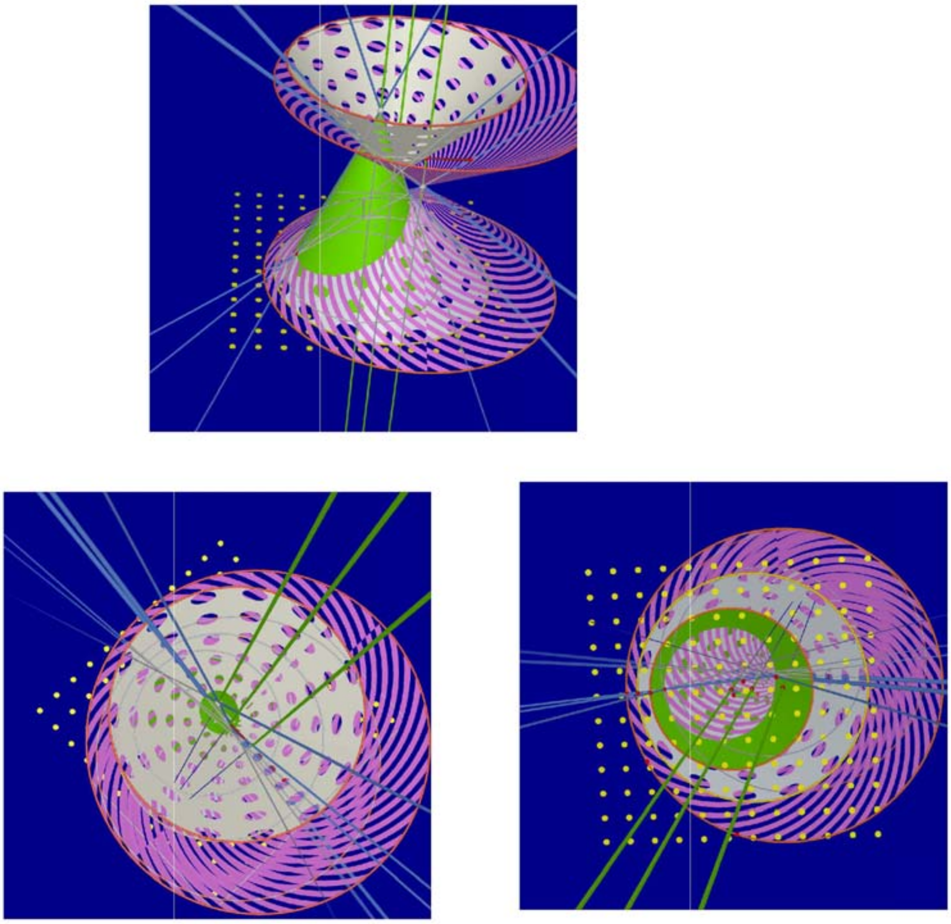
Molti, tra cui anche B. Russell, hanno cercato di dare la ricetta per conseguire la felicità. Io la immagino come le “briciole di pane buono”, disseminate da Dio sulla Terra per gli uomini. Quando cerchiamo la felicità, vogliamo queste briciole e possiamo vederne all’improvviso qualcuna vicino a noi e gustarla ma solo per pochi intensi attimi. Essa non va inseguita a tutti i costi, basta individuarla e raccoglierla come un fiore. Concordo, poi, con Banana Yoshimoto :“la felicità è anche non accorgersi che in realtà si è soli”. E’ vero, lo so. Chiaramente non parlo della felicità materiale, che viene rincorsa da chi la confonde con la ricchezza e il successo, ma di qualcosa che somiglia molto alla purezza interiore. Nella vita ciascuno di noi ricorda i propri momenti di felicità, che tiene nel cuore, perché questo diventa la sua casa. C’è poi la felicità del matematico. Diceva Renato Caccioppoli: ”Per tre cose vale la pena di vivere: la matematica, la musica e l’amore”. Provare felicità è assaporare l’estasi, la soddisfazione…nei pochi attimi in cui il matematico trova la soluzione di un difficile problema, la dimostrazione di una congettura o intuisce una proprietà geometrica. La dea Matematica, che tanto affligge, sa anche ripagare, eccome! La felicità è anche entrare in empatia con la musica, quella di Chopin, di Mozart, Beethoven. Infine essa è il sorriso splendente nel volto di chi ami, mentre ti augura: “Buongiorno, tesoro!”. Bravo Renato!

In English

Happiness

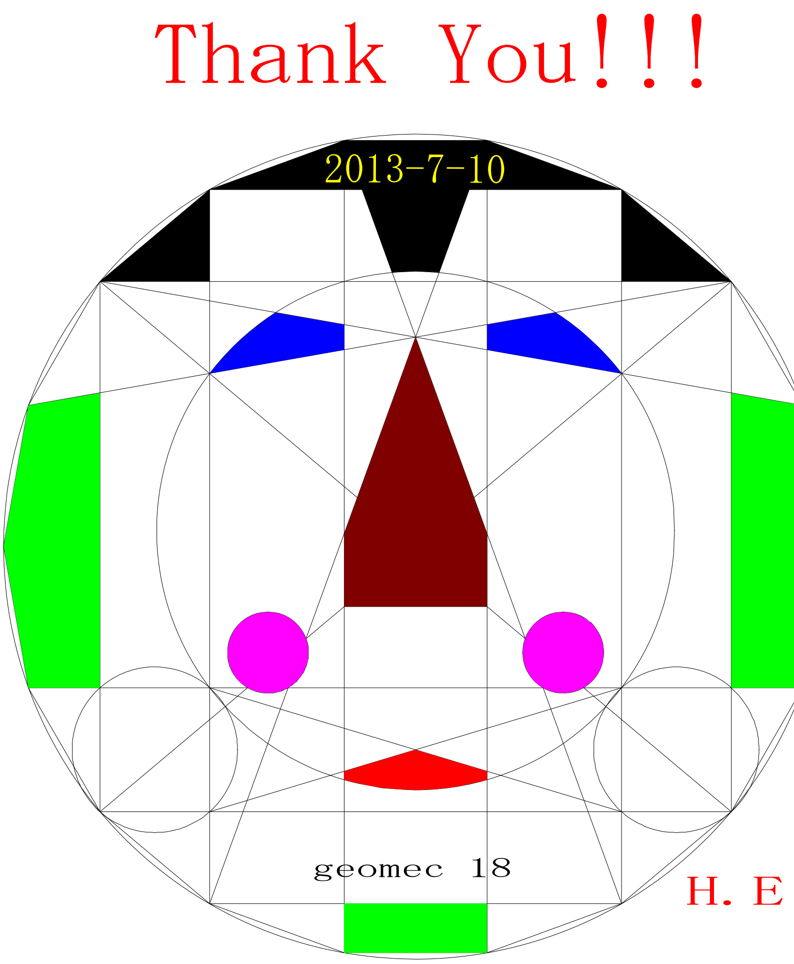
Many persons, including B. Russell, have tried to give the recipe to achieve happiness. I picture it as the " crumbs of good bread " planted by God on Earth for men. When we seek happiness, we want these crumbs and we can suddenly see someone close to us and enjoy it but only for a few intense moments. It should not be pursued at all costs, just locate and pick it up like a flower. I agree, then, with Banana Yoshimoto :"happiness is not even realize that in fact you are alone." It 's true, I know. Clearly I do not speak of happiness material, which is run by those who confuse it with wealth and success, but something that is very similar to the inner purity. In life, each of us remember their moments of happiness, that takes in the heart, because this becomes its home. Then there is the happiness of the mathematician. Renato Caccioppoli said: "For three things worth living: math, music and love." To feel happiness is savoring the ecstasy, satisfaction ... in the few moments in which the mathematician finds the solution to a difficult problem, proves a conjecture or guesses a geometric property. The goddess Mathematics, that afflicts so much, can also pay back, and how! Happiness is also empathize with the music, that of Chopin, Mozart, Beethoven. Finally it’s a smile shining in the face of man you love, and wish you "Good morning, sweetheart!" Renato, Bravo!

7　on　Space Curve　of　Doval



Dovalの空間曲線が、円錐面3つの共相貫線としてできる

8 Geomec 18



数学日記　62日

HOPE　and　PRAY　No.2

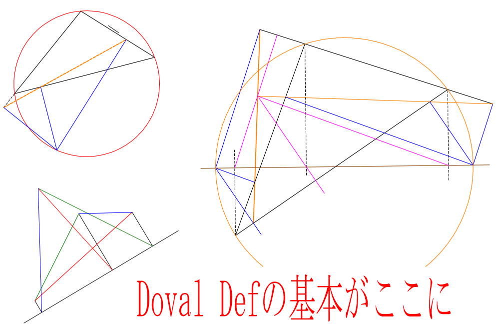
蛭子井博孝編著

Young Rose

Contents

7-14　net でアリアさんから交信不可能になった
それで、一人で、62 日は創ることにした。
アンチシュタイナーシュタイナーができた。
61 日の正方形を正三角形に変えアナロジーを追求したが、出来なかった。そして、アンチが出来た。
Geomec が苦しんだ。Rose とピースは、まーまー
DOVAL が問題何が見つかるか楽しみだ
苦しさの中に生まれる夏平和　微水弧山
63 日は、どうなるだろう　H.E

Simson and Orthopole Theory, and Combined Theory



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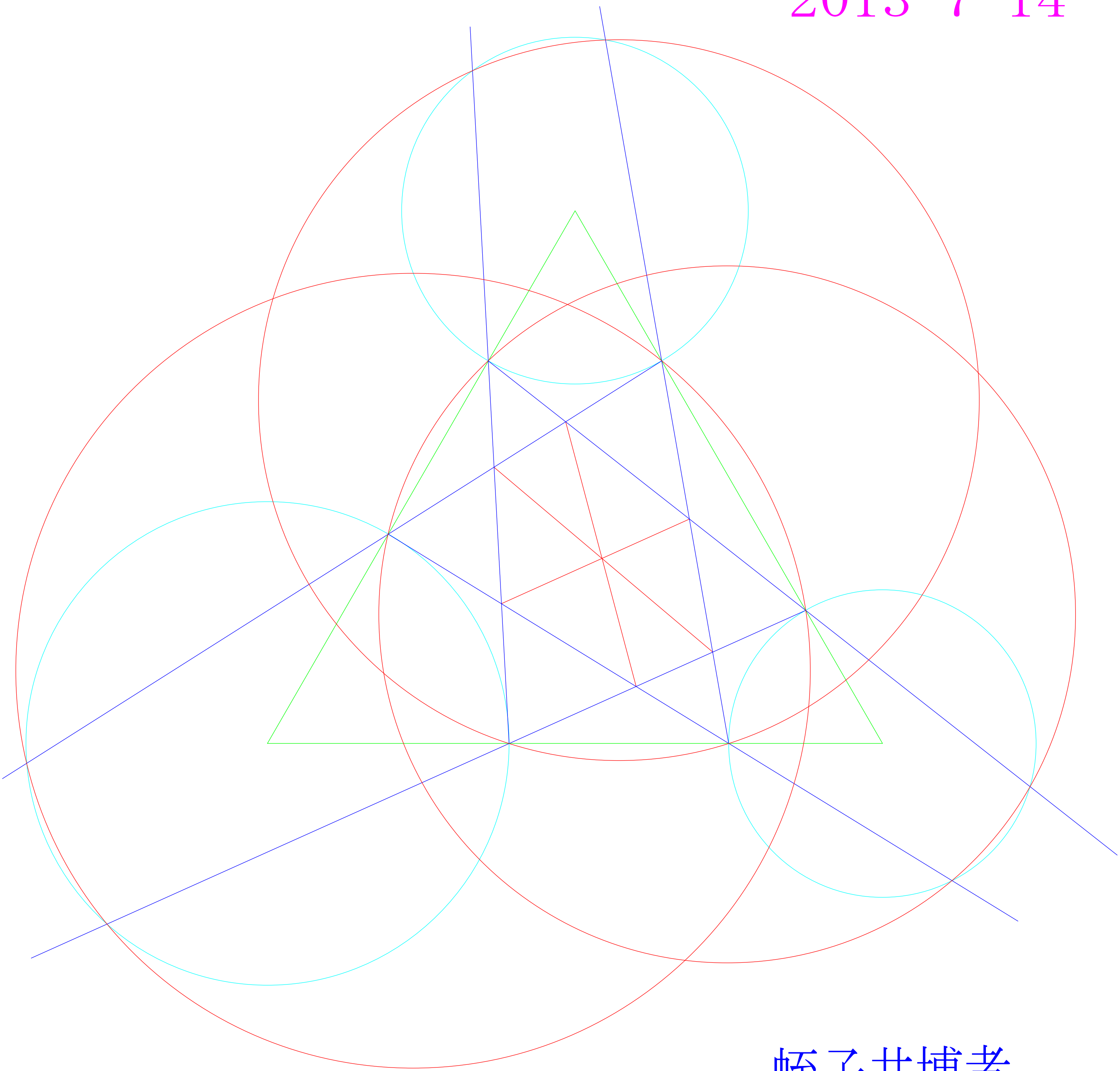
http://eh85.blogzine.jp/

2013-7-14

反シュタイナーシュタイナー定理

2013-7-14



蛭子井博孝

> # HI-NUM by H.E:

> **for** h **from** 1 **to** 50 **do** $pt := nextprime(10^h)$: fg := 0 :**for** e **from** 1 **to** 1000 **do if** fg = 0 **and** isprime($10^h - e$) **then** $fg := 1$: $print([10^h - e] < [10]^h < pt)$ **fi**:**od**:**od**:

$[7] < [10]$ **and** $[10] < 11$

$[97] < [10]^2$ **and** $[10]^2 < 101$

$[997] < [10]^3$ **and** $[10]^3 < 1009$

$[9973] < [10]^4$ **and** $[10]^4 < 10007$

$[99991] < [10]^5$ **and** $[10]^5 < 100003$

$[999983] < [10]^6$ **and** $[10]^6 < 1000003$

$[9999991] < [10]^7$ **and** $[10]^7 < 10000019$

$[99999989] < [10]^8$ **and** $[10]^8 < 100000007$

$[999999937] < [10]^9$ **and** $[10]^9 < 1000000007$

$[9999999967] < [10]^{10}$ **and** $[10]^{10} < 10000000019$

$[99999999977] < [10]^{11}$ **and** $[10]^{11} < 100000000003$

$[999999999989] < [10]^{12}$ **and** $[10]^{12} < 1000000000039$

$[9999999999971] < [10]^{13}$ **and** $[10]^{13} < 10000000000037$

$[99999999999973] < [10]^{14}$ **and** $[10]^{14} < 100000000000031$

$[999999999999989] < [10]^{15}$ **and** $[10]^{15} < 1000000000000037$

$[9999999999999937] < [10]^{16}$ **and** $[10]^{16} < 10000000000000061$

$[99999999999999997] < [10]^{17}$ **and** $[10]^{17} < 100000000000000003$

$[999999999999999989] < [10]^{18}$ **and** $[10]^{18} < 1000000000000000003$

$[9999999999999999961] < [10]^{19}$ **and** $[10]^{19} < 10000000000000000051$

$[99999999999999999989] < [10]^{20}$ **and** $[10]^{20} < 100000000000000000039$

$[999999999999999999899] < [10]^{21}$ **and** $[10]^{21} < 1000000000000000000117$

$[9999999999999999999973] < [10]^{22}$ **and** $[10]^{22} < 10000000000000000000009$

$[99999999999999999999977] < [10]^{23}$ **and** $[10]^{23} < 100000000000000000000117$

$[999999999999999999999743] < [10]^{24}$ **and** $[10]^{24} < 1000000000000000000000007$

$[9999999999999999999999877] < [10]^{25}$ **and** $[10]^{25} < 10000000000000000000000013$

$[99999999999999999999999859] < [10]^{26}$ **and** $[10]^{26}$
$< 100000000000000000000000067$

$[999999999999999999999999901] < [10]^{27}$ **and** $[10]^{27}$
$< 1000000000000000000000000103$

$[9999999999999999999999999791] < [10]^{28}$ **and** $[10]^{28}$
$< 10000000000000000000000000331$

$[99999999999999999999999999973] < [10]^{29}$ **and** $[10]^{29}$
$< 100000000000000000000000000319$

$[999999999999999999999999999989] < [10]^{30}$ **and** $[10]^{30}$
$< 1000000000000000000000000000057$

$[9999999999999999999999999999973] < [10]^{31}$ **and** $[10]^{31}$
$< 100000000000000000000000000000033$

$[99999999999999999999999999999999979] < [10]^{32}$ **and** $[10]^{32}$
$< 100000000000000000000000000000049$

$[999999999999999999999999999999991] < [10]^{33}$ **and** $[10]^{33}$
$< 1000000000000000000000000000000061$

$[9999999999999999999999999999999589] < [10]^{34}$ **and** $[10]^{34}$
$< 10000000000000000000000000000000193$

$[99999999999999999999999999999999977] < [10]^{35}$ **and** $[10]^{35}$
$< 100000000000000000000000000000000069$

$[999999999999999999999999999999999841] < [10]^{36}$ **and** $[10]^{36}$
$< 1000000000000000000000000000000000067$

$[9999999999999999999999999999999999919] < [10]^{37}$ **and** $[10]^{37}$
$< 10000000000000000000000000000000000043$

$[99999999999999999999999999999999999941] < [10]^{38}$ **and** $[10]^{38}$
$< 100000000000000000000000000000000000133$

$[999999999999999999999999999999999999943] < [10]^{39}$ **and** $[10]^{39}$
$< 1000000000000000000000000000000000000003$

$[9999999999999999999999999999999999999983] < [10]^{40}$ **and** $[10]^{40}$
$< 10000000000000000000000000000000000000121$

$[99999999999999999999999999999999999999881] < [10]^{41}$ **and** $[10]^{41}$
$< 100000000000000000000000000000000000000109$

$[999999999999999999999999999999999999999917] < [10]^{42}$ **and** $[10]^{42}$
$< 1000000000000000000000000000000000000000063$

$[9999999999999999999999999999999999999999919] < [10]^{43}$ **and** $[10]^{43}$
$< 10000000000000000000000000000000000000000057$

$[99999999999999999999999999999999999999999947] < [10]^{44}$ **and** $[10]^{44}$
$< 100000000000000000000000000000000000000000031$

$[999999999999999999999999999999999999999999991] < [10]^{45}$ **and** $[10]^{45}$
$< 1000000000000000000000000000000000000000000009$

$[9999999999999999999999999999999999999999999967] < [10]^{46}$ **and** $[10]^{46}$
$< 10000000000000000000000000000000000000000000121$

$[99999999999999999999999999999999999999999999959] < [10]^{47}$ **and** $[10]^{47}$
$< 100000000000000000000000000000000000000000000033$

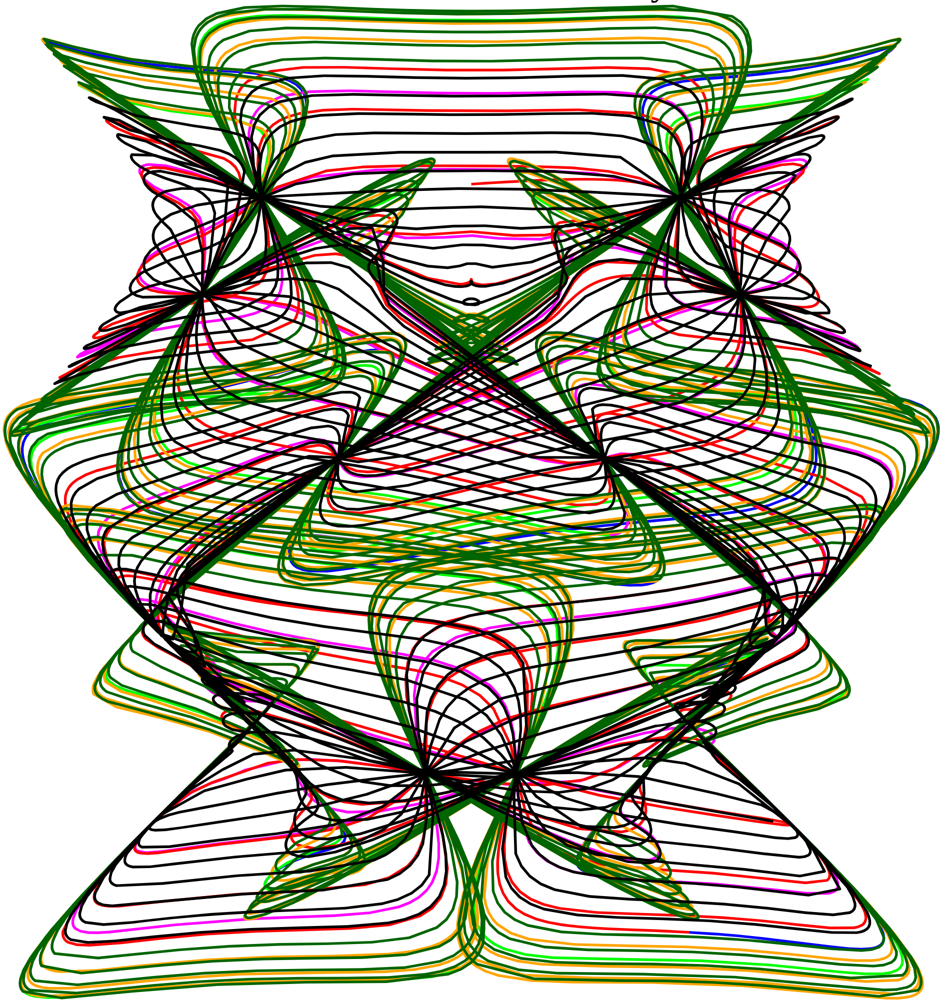
$[999999999999999999999999999999999999999999999967] < [10]^{48}$ **and** $[10]^{48}$
$< 1000000000000000000000000000000000000000000000193$

$[9999999999999999999999999999999999999999999999943] < [10]^{49}$ **and** $[10]^{49}$
$< 10000000000000000000000000000000000000000000000009$

$[99999999999999999999999999999999999999999999999943] < [10]^{50}$ **and** $[10]^{50}$ **(1)**
$< 100000000000000000000000000000000000000000000000151$

幾何数学日記　希望と祈り－13－

Pachikuri DATE 704-1 RAN by H.E

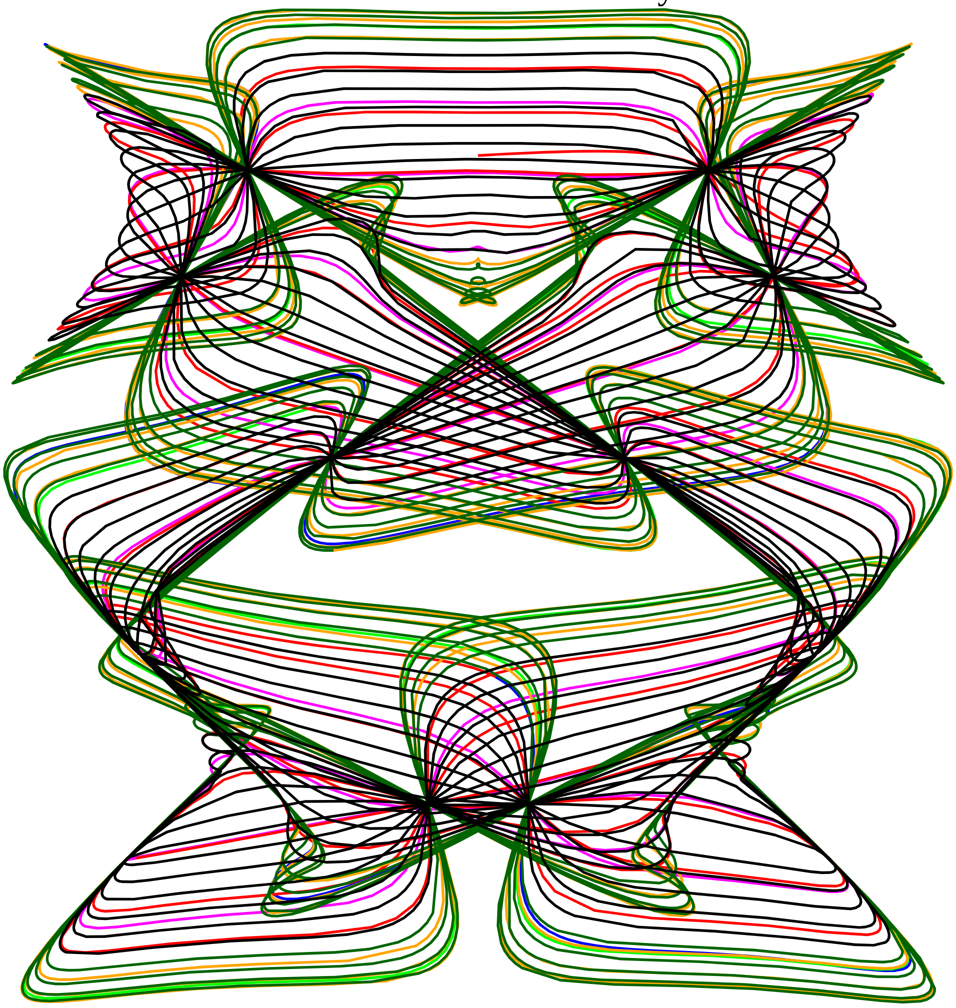


"07-04-(11:30:52 PM)"

$PCD704C85, EQ704C = [5, 2, 1]$

$$EQ = \left[\sin\left(\frac{15}{2}t + \frac{5}{2}t^3\right) + \sin\left(\cos\left(\frac{33}{2}t + \frac{11}{2}t^3\right)\right)\sin\left(\frac{33}{2}t + \frac{11}{2}t^3\right)\sin(t),\right.$$
$$\left.\cos(3t + t^3) + \cos\left(\cos\left(\frac{33}{2}t + \frac{11}{2}t^3\right)\right)\cos\left(\frac{33}{2}t + \frac{11}{2}t^3\right)\sin(t), t = 0..\frac{1}{4}\pi\right]$$

Pachikuri DATE 704-1 RAN by H.E

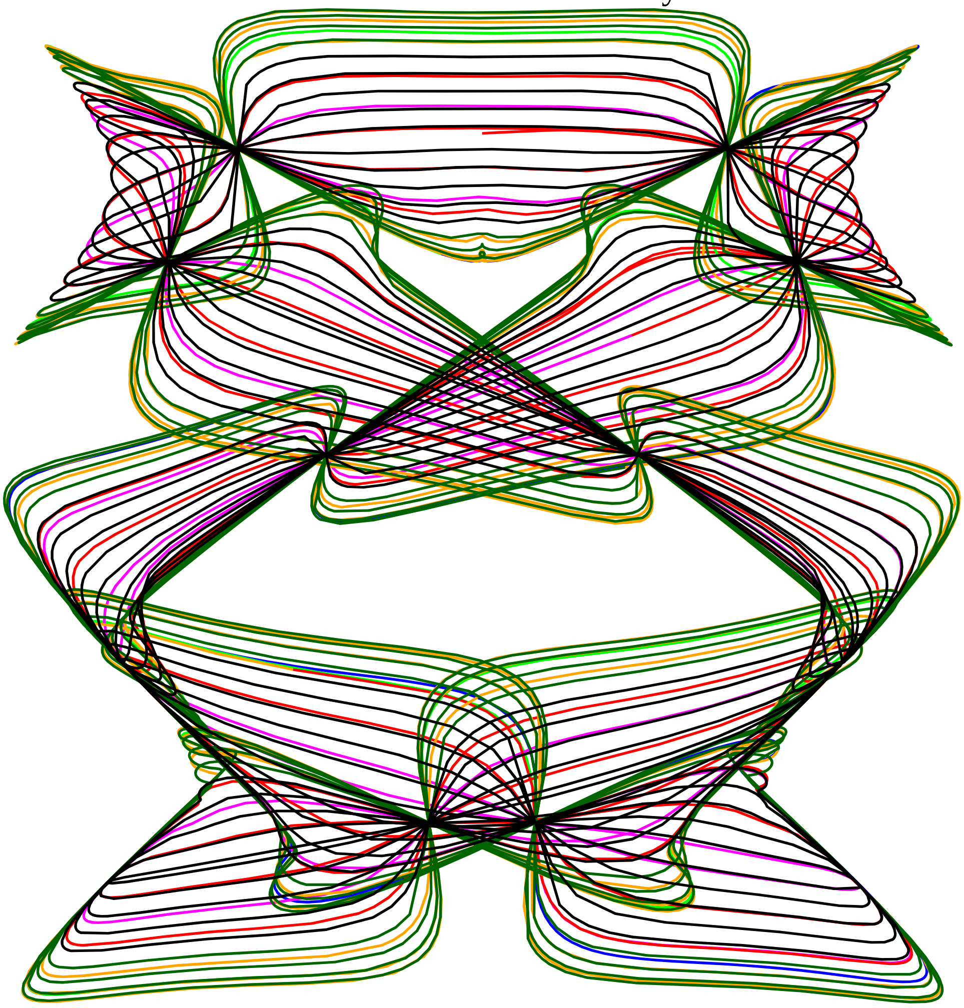


"07-04-(11:30:53 PM)"

$$PCD704C86, EQ704C = \left[5, 2, \frac{4}{3}\right]$$

$$EQ = \left[\sin\left(\frac{45}{7}t + \frac{15}{7}t^3\right) + \frac{3}{4}\sin\left(\cos\left(\frac{99}{7}t + \frac{33}{7}t^3\right)\right)\sin\left(\frac{99}{7}t + \frac{33}{7}t^3\right)\sin(t), \cos\left(\frac{18}{7}t + \frac{6}{7}t^3\right) + \frac{3}{4}\cos\left(\cos\left(\frac{99}{7}t + \frac{33}{7}t^3\right)\right)\cos\left(\frac{99}{7}t + \frac{33}{7}t^3\right)\sin(t), t = 0 .. \frac{1}{4}\pi\right]$$

Pachikuri DATE 704-1 RAN by H.E

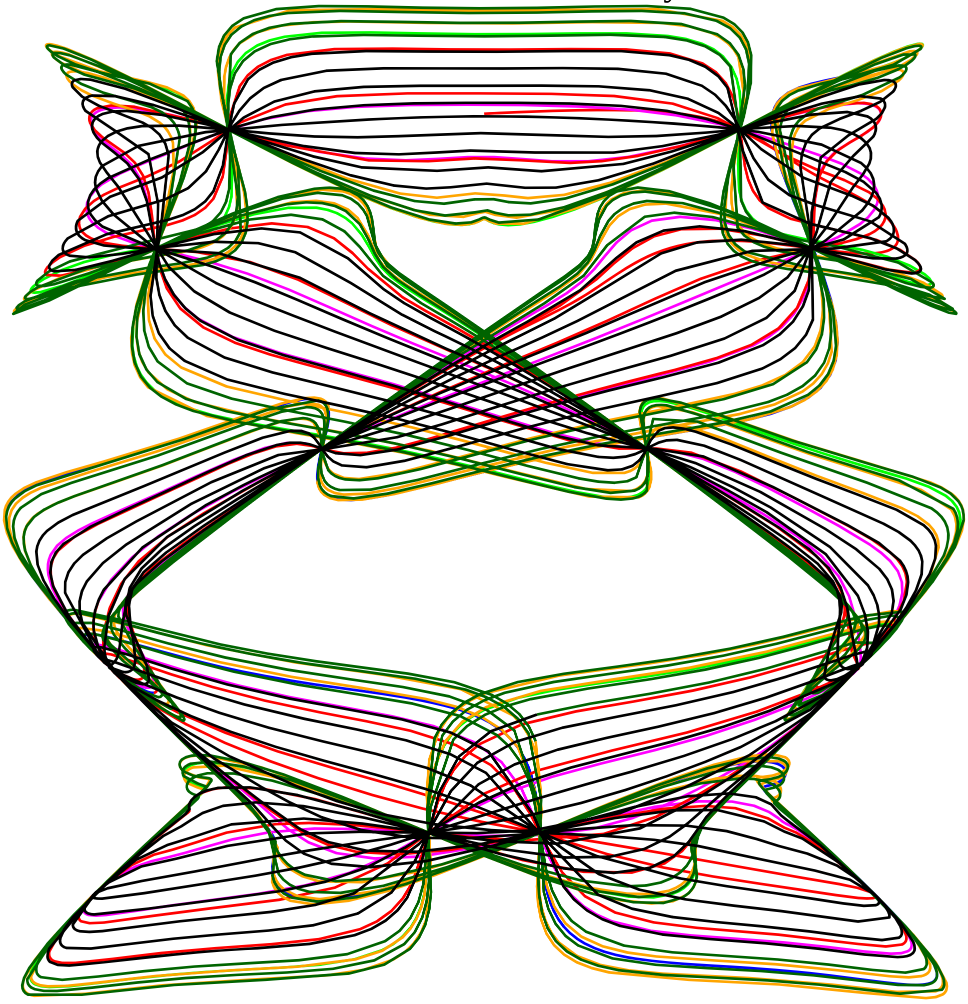


"07-04-(11:30:54 PM)"

$$PCD704C87, EQ704C = \left[5, 2, \frac{5}{3}\right]$$

$$EQ = \left[\sin\left(\frac{45}{8}\,t + \frac{15}{8}\,t^3\right) + \frac{3}{5}\sin\left(\cos\left(\frac{99}{8}\,t + \frac{33}{8}\,t^3\right)\right)\sin\left(\frac{99}{8}\,t + \frac{33}{8}\,t^3\right)\sin(t), \cos\left(\frac{9}{4}\,t + \frac{3}{4}\,t^3\right) + \frac{3}{5}\cos\left(\cos\left(\frac{99}{8}\,t + \frac{33}{8}\,t^3\right)\right)\cos\left(\frac{99}{8}\,t + \frac{33}{8}\,t^3\right)\sin(t), t = 0 .. \frac{1}{4}\pi\right]$$

Pachikuri DATE 704-1 RAN by H.E



"07-04-(11:30:54 PM)"

PCD704C88, *EQ704C* = [5, 2, 2]

$$EQ = \left[\sin\left(5\,t + \frac{5}{3}\,t^3\right) + \frac{1}{2}\,\sin\left(\cos\left(11\,t + \frac{11}{3}\,t^3\right)\right)\sin\left(11\,t + \frac{11}{3}\,t^3\right)\sin(t),\ \cos\left(2\,t + \frac{2}{3}\,t^3\right) + \frac{1}{2}\,\cos\left(\cos\left(11\,t + \frac{11}{3}\,t^3\right)\right)\cos\left(11\,t + \frac{11}{3}\,t^3\right)\sin(t),\ t = 0\,..\,\frac{1}{4}\,\pi\right]$$

In Japanese　　　　　平和　　　　by　蛭子井博孝

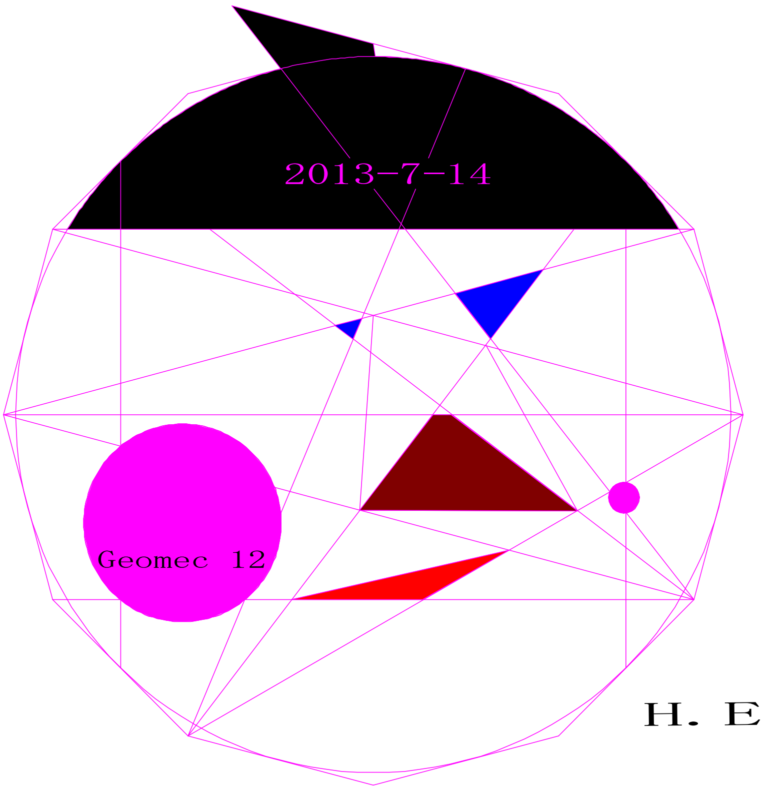
世界が、平和になったという、実感はあるが、平和を保つことの大事さ、平和が、いかに重要な社会状況であるか，多くの人が心得なければならないことであるし、みんなで考え及ばなければならないことである。平和の社会が、人の命を無法意に奪うことがなく、すべての人が、自由に生きることができ、人が心のままに活躍でき、言論のままに行動できる社会をつくってきているのであろう.本当に、命が安全で、心のままに生きていける平和な社会、そこには、個人の思考の自由と、その思考の存在が、他社に、自然に役立ち、妨害されることのない環境が出来ていると言うことがいえよう。誰のどんな言論も行動も、他者が、共用できる社会、それが、平和な社会であろう。本当に、安全な、自由な社会、それを作り上げること、それが、個人の仕事であり、社会の仕事である。それには、私欲が、私有されることのないものを作り上げることに費やされるのであろう。我々の、個人の仕事が、他者のためになり、共用されるようになってきて、初めて、人の存在価値を享受できる平和な時代になるのであるう。そのためには、みんながメンタルな仕事を尊ぶことが重要になる.ああ、平和とは、思考の自由な存在が存続できる社会環境といえよう。

In English　　　　　Peace

We feel this world become peace, resently.It is important that we keep the peace of the world and the peace is very important circunstance and ,we must think this is so,and, we must think about that is so. The peace world dose not destroy the life of person and all of the people live freely and work as they like and do as they talk,this situation maybe established by peace.The safety of our life and the life as we think by heart are called as peace world. And this world establish that the free thought of people and its exsistance help others and its also don't disturb others.It maybe a peace world that any person's talk and action can be shared by other person.To construct safety and liberty society is person's job and society's job. For this purpose private desire are not privated and spended to person own aim.Our private job help others and are shared by others,then person's exsistance become to be shared and peace world comes.For these purpose, we all must think that metal work and mathematical work is important.These peace is a social curcumstance that keep the freedom of the existance of thought as we like.

7 Geomec 12

THANK You!!!



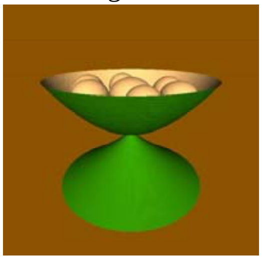
数学日記

geoMathe Diary 63th

Hope and Pray No.3

Ebisui Hirotaka & Maria Intagliata

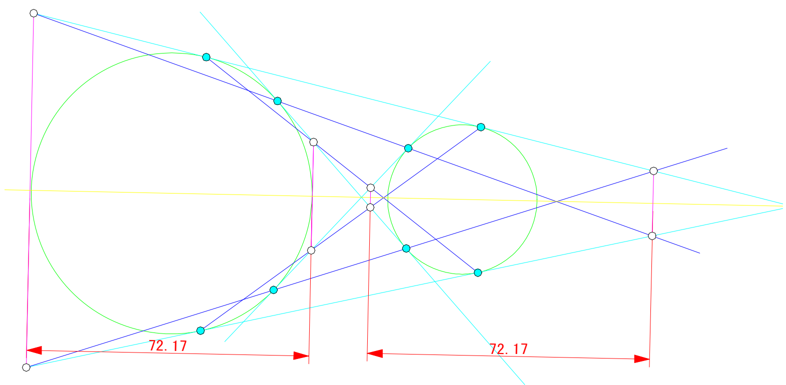
Congratulation



M.I

Contents

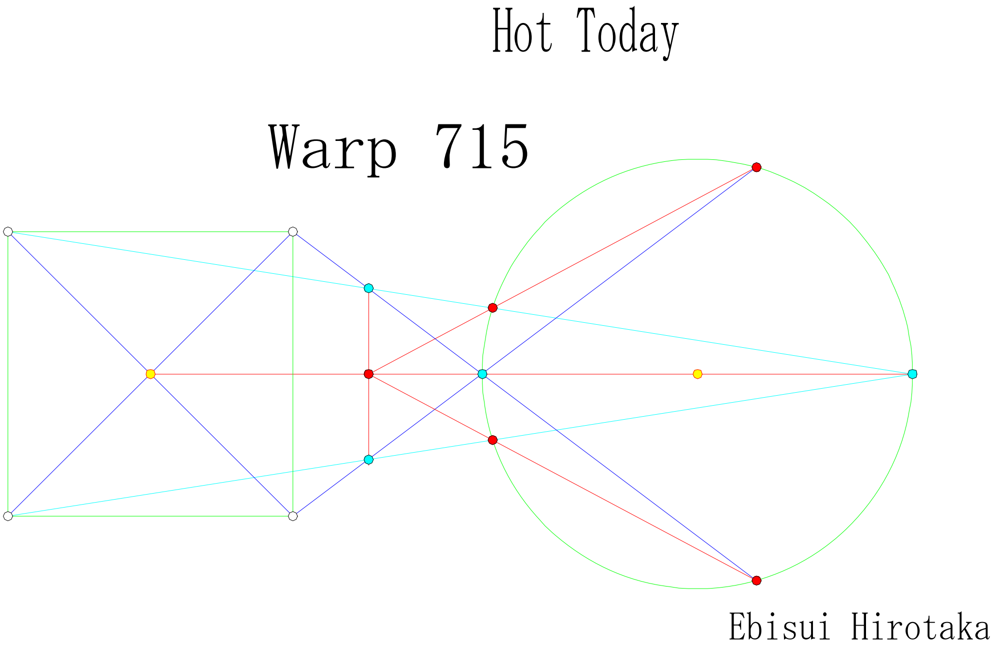
7/15 いよいよ、我々の年 63 歳 63th に取りかかる.マリアさんの誕生日までに仕上げる予定。
2,7 は、これから,創る。できる予感。
warp とは、warp を考えること。正方形と円を使う定理.さあ、開始、後でね。。。。。。
。2 ができほっと。DOVAL は、準円と補助円による定義ができそう.もう一日費やす。
いやはやできたよ。やった。63 日
夏の朝　ドーバルできて　一安心　(H.E)

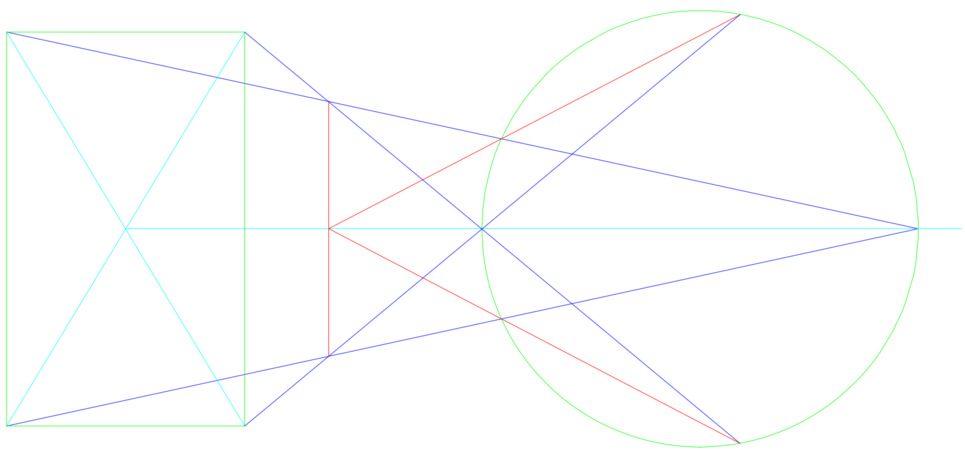


卵形線研究-センター

http://eh85.blogzine.jp/orion/

2 Warp 715





3 NUMTable

```
> # HI − NUM x^e + m^m + y^e = z^h by H.E :
> for e from 2 to 5 do for h from 2 to 8 do c := 0 :for m from 2 to 13 do for z from 2 to 27 do
    for x from 2 to 24 do for y from x to 25 do if x^e + m^m + y^e = z^h then c := c + 1 :
    print(EHM[E = e, H = h, M = m]^c = [[x]^e + [m]^m + [y]^e = [z]^h]) fi:od:od:od:od:od:od:
```

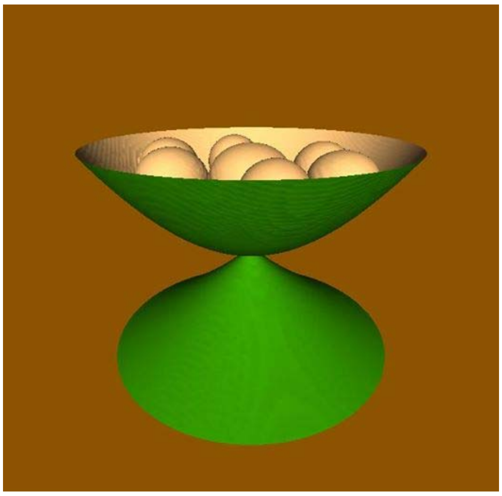
$$EHM_{E=2,\,H=2,\,M=2} = [2\,[4]^2 + [2]^2 = [6]^2]$$
$$EHM^{2}_{E=2,\,H=2,\,M=2} = [[3]^2 + [2]^2 + [6]^2 = [7]^2]$$
$$EHM^{3}_{E=2,\,H=2,\,M=2} = [[6]^2 + [2]^2 + [9]^2 = [11]^2]$$
$$EHM^{4}_{E=2,\,H=2,\,M=2} = [[5]^2 + [2]^2 + [14]^2 = [15]^2]$$
$$EHM^{5}_{E=2,\,H=2,\,M=2} = [[10]^2 + [2]^2 + [11]^2 = [15]^2]$$
$$EHM^{6}_{E=2,\,H=2,\,M=2} = [[8]^2 + [2]^2 + [16]^2 = [18]^2]$$
$$EHM^{7}_{E=2,\,H=2,\,M=2} = [[10]^2 + [2]^2 + [25]^2 = [27]^2]$$
$$EHM^{8}_{E=2,\,H=2,\,M=2} = [[14]^2 + [2]^2 + [23]^2 = [27]^2]$$
$$EHM^{9}_{E=2,\,H=2,\,M=3} = [[3]^2 + [3]^3 + [8]^2 = [10]^2]$$
$$EHM^{10}_{E=2,\,H=2,\,M=3} = [[6]^2 + [3]^3 + [9]^2 = [12]^2]$$
$$EHM^{11}_{E=2,\,H=2,\,M=3} = [[5]^2 + [3]^3 + [12]^2 = [14]^2]$$
$$EHM^{12}_{E=2,\,H=2,\,M=3} = [[2]^2 + [3]^3 + [15]^2 = [16]^2]$$
$$EHM^{13}_{E=2,\,H=2,\,M=3} = [[7]^2 + [3]^3 + [18]^2 = [20]^2]$$
$$EHM^{14}_{E=2,\,H=2,\,M=3} = [[4]^2 + [3]^3 + [21]^2 = [22]^2]$$
$$EHM^{15}_{E=2,\,H=2,\,M=3} = [[15]^2 + [3]^3 + [18]^2 = [24]^2]$$
$$EHM^{16}_{E=2,\,H=2,\,M=4} = [[2]^2 + [4]^4 + [8]^2 = [18]^2]$$
$$EHM^{17}_{E=2,\,H=2,\,M=4} = [[4]^2 + [4]^4 + [13]^2 = [21]^2]$$
$$EHM^{18}_{E=2,\,H=2,\,M=4} = [[8]^2 + [4]^4 + [11]^2 = [21]^2]$$
$$EHM^{19}_{E=2,\,H=2,\,M=4} = [[8]^2 + [4]^4 + [16]^2 = [24]^2]$$
$$EHM^{20}_{E=2,\,H=2,\,M=4} = [[12]^2 + [4]^4 + [15]^2 = [25]^2]$$
$$EHM_{E=2,\,H=3,\,M=2} = [[4]^2 + [2]^2 + [14]^2 = [6]^3]$$
$$EHM^{2}_{E=2,\,H=3,\,M=2} = [[10]^2 + [2]^2 + [25]^2 = [9]^3]$$
$$EHM^{3}_{E=2,\,H=3,\,M=2} = [[14]^2 + [2]^2 + [23]^2 = [9]^3]$$
$$EHM^{4}_{E=2,\,H=3,\,M=3} = [2\,[7]^2 + [3]^3 = [5]^3]$$
$$EHM^{5}_{E=2,\,H=3,\,M=3} = [[14]^2 + [3]^3 + [17]^2 = [8]^3]$$
$$EHM^{6}_{E=2,\,H=3,\,M=5} = [[5]^2 + [5]^5 + [15]^2 = [15]^3]$$
$$EHM^{7}_{E=2,\,H=3,\,M=5} = [[9]^2 + [5]^5 + [13]^2 = [15]^3]$$
$$EHM_{E=2,\,H=4,\,M=3} = [[2]^2 + [3]^3 + [15]^2 = [4]^4]$$
$$EHM^{2}_{E=2,\,H=4,\,M=4} = [[12]^2 + [4]^4 + [15]^2 = [5]^4]$$

$$EHM_{E=2,\ H=6,\ M=2} = [[10]^2 + [2]^2 + [25]^2 = [3]^6]$$
$$EHM^2_{E=2,\ H=6,\ M=2} = [[14]^2 + [2]^2 + [23]^2 = [3]^6]$$
$$EHM_{E=2,\ H=8,\ M=3} = [[2]^2 + [3]^3 + [15]^2 = [2]^8]$$
$$EHM_{E=3,\ H=2,\ M=3} = [3\ [3]^3 = [9]^2]$$
$$EHM_{E=3,\ H=3,\ M=3} = [[4]^3 + [3]^3 + [5]^3 = [6]^3]$$
$$EHM^2_{E=3,\ H=3,\ M=3} = [[10]^3 + [3]^3 + [18]^3 = [19]^3]$$
$$EHM^3_{E=3,\ H=3,\ M=3} = [[18]^3 + [3]^3 + [24]^3 = [27]^3]$$
$$EHM^4_{E=3,\ H=3,\ M=5} = [2\ [5]^3 + [5]^5 = [15]^3]$$
$$EHM_{E=3,\ H=4,\ M=3} = [3\ [3]^3 = [3]^4]$$
$$EHM_{E=3,\ H=5,\ M=4} = [[5]^3 + [4]^4 + [14]^3 = [5]^5]$$
$$EHM_{E=4,\ H=2,\ M=2} = [2\ [2]^4 + [2]^2 = [6]^2] \quad (1)$$

4　4-1 3D by M.I

Da lanciare a chi so io...

（x^2 +y^2 -(1-z)*z^2)*(x^2+y^2-2*z)*((x+0.71)^2+y^2+(z-0.7)^2-0.085)*((x-0.71)^2+y^2+1.2*(z-0.7)^2-0.1)*(x^2+(y-0.71)^2+(z-0.7)^2-0.081)*(x^2+(y+0.71)^2+(z-0.71)^2-0.081)*((x-0.7)^2+(y+0.7)^2+1.2*(z-0.71)^2-0.09)*((x+0.6)^2+(y-0.6)^2+1.65*(z-0.78)^2-0.08)=0

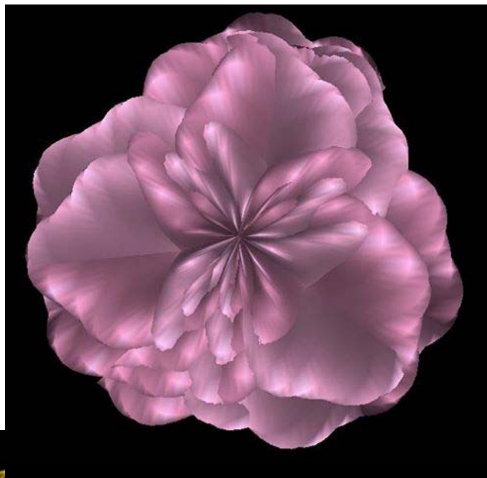


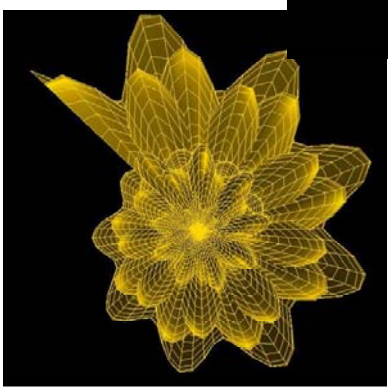
Peace flower

x=0.8*2^log(cos(sin(cos(sin(6*u+4.5*v)))))*cos(6.5*v-4.5*u)

y=0.99*sin(1.56*u)*sin(2*v)

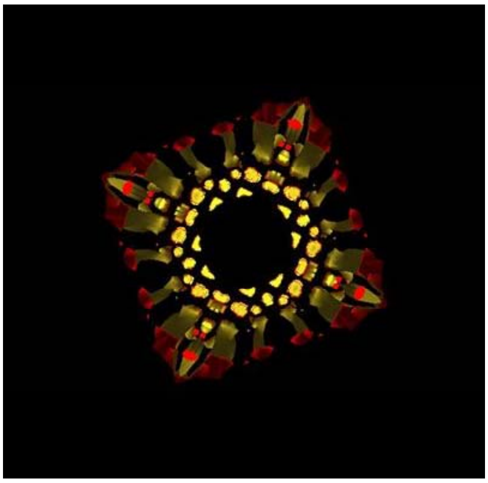
z=cos(1.5*u)*sin(2*v)





Jewel …

(((1/2.3)^2 *(x^2 + y^2 + z^2))^-6 + ((1/2)^8 * (x^8 + y^8 + z^8))^6 -0.5)^2-(cos(x^2 + y ^2 + z^2 +cos(9*x)+cos(9*y)+cos(9*z)-0.2)^3*(cos(8*x) + cos(8*y) + cos(8*z))^2)^2=0

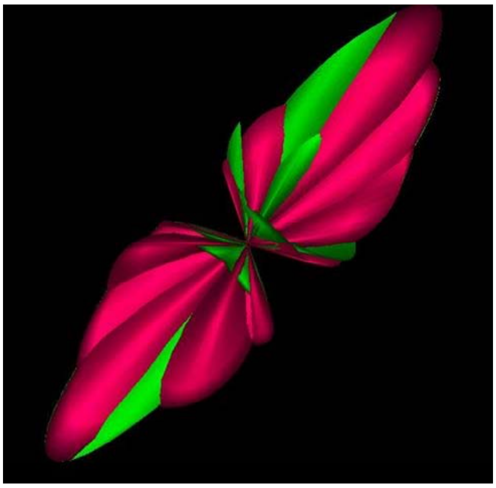


Love flower...

x=1.5*cos(7*u+5.15*v)*cos(v)^1.1*sin(7.2*v)

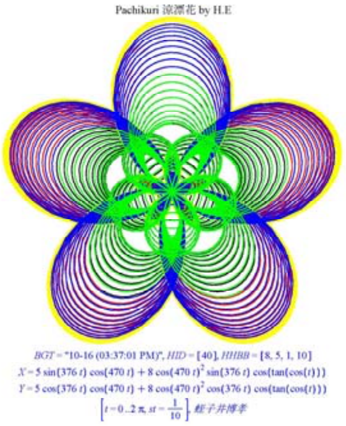
y=sin(3.2*u)*sin(7*v)

z=pi^cos(3*u)*sin(7*v)

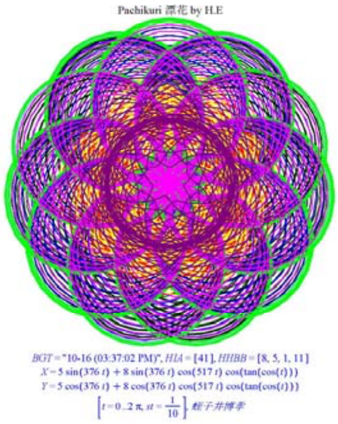


4-2　　2D　by H.E

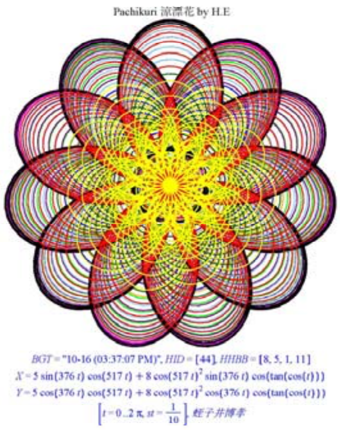
RYOUKA　　(5/10)



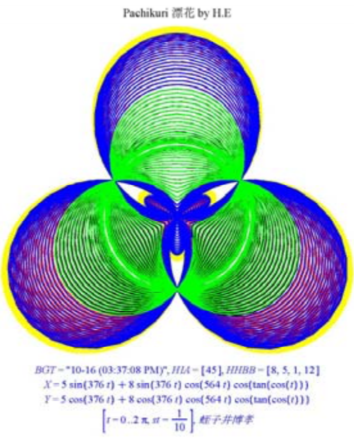
RYOUKA　　(6/10)



RYOUKA　　(9/10)



RYOUKA　　(10/10)

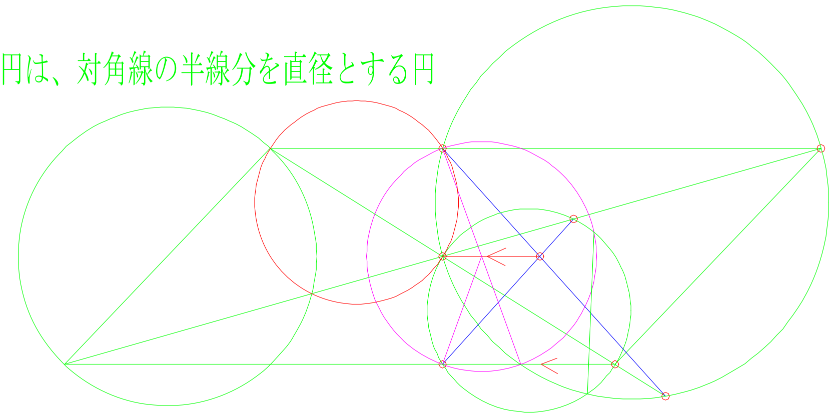


5　点線円幾何学　HI-17

HI-017

平行四辺形と円の平行線定理　2008-1-8

青の円は、対角線の半線分を直径とする円



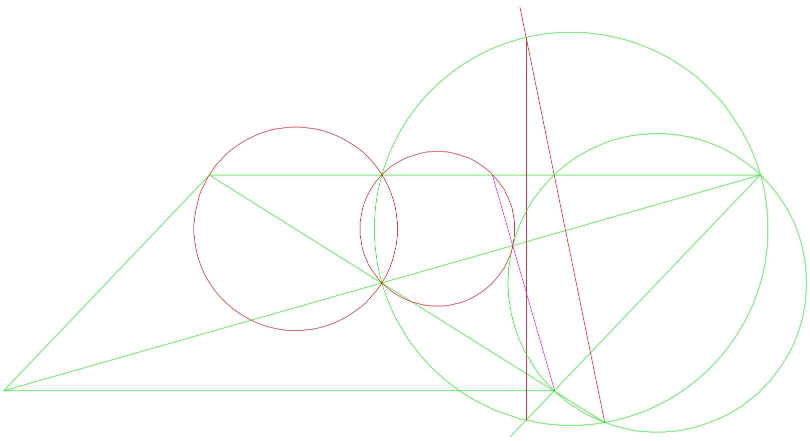
by　H.EBISUI

平凡な結論を追加

2013　7-15

2009-1-7

平行四辺形と円の垂直定理



蛭子井博孝

6 Our PEACE

平和　　　Ebisui　Hirotaka

我々は、何かを得て喜ぶ.そして、それを失って、悲しむ
今我々は、平和を得ている。それを失うことがあってはならない。
ひとは、穏やかな日々を、過ごすとき、その大切さを忘れている
しかし、その日々を失って、初めて、悲しみを覚える
平和とは、悲しみのない日々をいう.喜びがなくてもいい。悲しみや、いらだちがなければ。いま、わたしは、平和を感じる。いや、安らぎを感じている。この、安らぎが、失われないように祈る。こころのやすらぎ、こころのへいわ、ありがとう。

In English　peace

We got somethings and feel happinees for them.And,when we lost them,we feel sadness.
We get peace world.We must not lost them.People foget the importanceness of calm days,while days are clam.
But,when we lost them we feel sadness. Peace is in sadless days. Even if there are no hapiness, we feel peace if there are no sadness and no stress. We feel peace or calm in mind. We pray this mind window will not disapear. We appriciate to you for this peace and calm

La Pace　　　　Maria Integliata

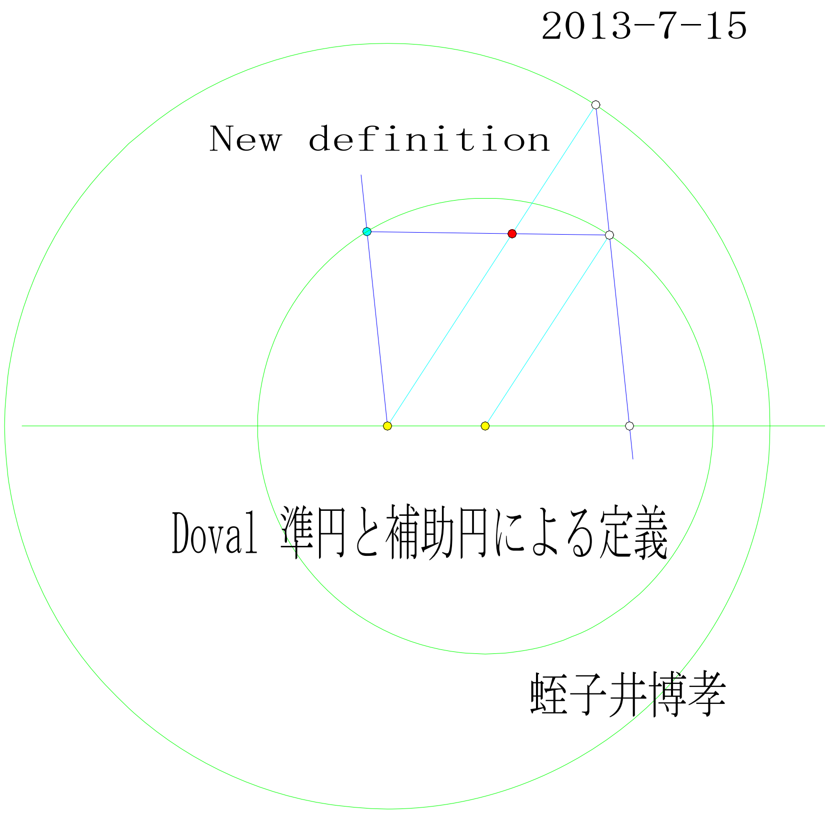
Sul senso della pace l’ uomo si è sempre interrogato, fin dai tempi più remoti. Si è in pace in assenza di conflitti, quando si è in armonia sia socialmente che politicamente e, nel nostro piccolo, anche nei quotidiani rapporti interpersonali. Ci sentiamo in pace quando siamo a posto con la nostra coscienza, consapevoli di aver agito eticamente e giustamente. La pace porta naturalmente uno stato di benessere, di felicità e se è in ciascuno di noi lo sarà tra tutti gli uomini. Il suo seme è l’amore, dunque non c’è pace senza amore, così come non c’è pace senza giustizia, senza libertà, senza il perdono. Essa, infatti, è il “bellissimo fiore profumato” che nasce da sentimenti accomunati dall’amore: la fratellanza, la condivisione, la tolleranza, la comprensione e il rispetto reciproci, senza i quali essa non può esistere nel mondo. Per questo bene universale occorre la collaborazione di ogni individuo che ascolti il suo cuore, in pace con se stesso e disposto a lavorare per il bene dell’ Umanità: conquistare la pace è un obiettivo esaltante più di ogni trionfo di guerra. Ecco una via per la pace: svuotare gli arsenali delle armi e trasformarli in granai per i milioni di esseri umani che muoiono di fame nel mondo. La pace va costruita dalla società. Se in una famiglia regnano l’amore e l’armonia, lì ci sarà la pace, fatto improbabile secondo A. Schopenhauer, il quale definisce il matrimonio: guerra e necessità e la vita da single: pace e prosperità.

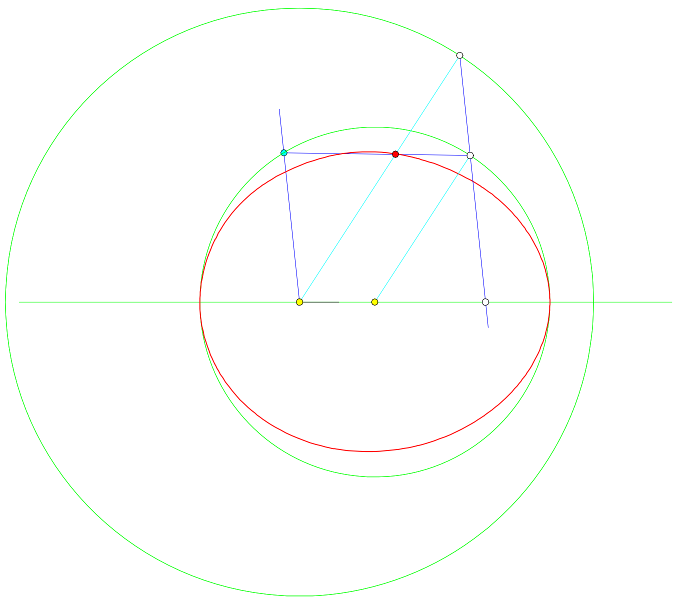
In English

Peace

On the way of peace man has always questioned, since the earliest times. We’re at peace in the absence of conflict, when we are in harmony both socially and politically and, in our small even, in everyday interpersonal relationships. We feel at peace when we're done with our consciousness, aware that we acted ethically and appropriately. Peace leads naturally a state of well-being, happiness and if it is in each of us, it will be among all men. Its seed is love, then there is no peace without love, as there is no peace without justice, no freedom, no forgiveness. In fact, it is the "beautiful fragrant flower" that stems from feelings united by: the brotherhood, sharing, tolerance, understanding and mutual respect, without which it can not be in the world. For this universal good we need the cooperation of every individual who listens his heart, at peace with himself and willing to work for the good of Humanity: building peace is a goal exhilarating than any triumph of war. Here is a way to peace: empty arsenals of weapons and turn them into barns for the millions of human beings, who are dying of hunger in the world. Peace must be built by the company. If a family's love and harmony reign, there will be peace, made unlikely according to A. Schopenhauer, which defines marriage: war and needs and the single life: peace and prosperity.

7　Doval 準円と補助円による定義





あとがき後期
幾何数学妙書を出し、5 年、ここに幾何数学の研究手引き書を編んだ、五年の歳月を第二部の幾何数学の小径に著し、前後を,幾何数学日記で、編んだ。
題は、幾何数学　理想と情熱の花　とした。

幾何数学　理想と情熱の花
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