

# ***Original article***

## ***Consideration of Riemann hypothesis 43 counterexamples***

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### ***Abstract***

I also found a zero point which seems to deviate from 0.5.

I thought that the zero point outside 0.5 can not be found very easily in the area which can not be shown in the figure, but this area can not be represented in the figure but can be found one after another.

It is completely unknown whether this axis is distorted in the 0.5 axis or just by coincidence.

The number of zero points in the area that can not be shown in the figure is now 43.

No matter how you looked it was not found in other areas.

It seemed that there is no other way to interpret this axis as 0.5 axis is distorted in this area.

Somewhere on the net there is a memory that reads the mathematician's view that "there are countless zero points in the vicinity of 0.5 on high area".

We are reporting that the zero point search of the high-value area of the imaginary part which was giving up as it is no longer possible with the supercomputer is no longer possible, is reported.

43 zero-point searches in the high-value area of the imaginary part are thus successful.

This means that the zero point search in the high-value area of the imaginary part has succeeded in the 43.

We will also write 43 zero point searches of the successful high-value area of the imaginary part.

There are many counterexamples far beyond 0.5, which is far beyond the limit, but the computer can not calculate it.

Moreover, I believe that it can only be confirmed on supercomputer whether this is really counterexample. In addition, it is necessary to make corrections in the supercomputer.

## ***Introduction***

To be exact, it seems that (1) and (2) formula should be used.

$$\zeta(1 - s) = \frac{2}{(2\pi)^s} \Gamma(s) \sin\left(\frac{s\pi}{2}\right) \zeta(s) \quad (1)$$

$$\zeta(1 - s) = \frac{\pi^{-\frac{s}{2}} \Gamma\left(\frac{s}{2}\right) \zeta(s)}{\pi^{\frac{s-1}{2}} \Gamma\left(\frac{1-s}{2}\right)} \quad (2)$$

$$\zeta(1 - s) = \zeta(s) \quad (3)$$

However, (1) is an integer domain and (2) is a complex number domain. It is not possible to find the number corresponding to  $s = 0.5001$ .

Therefore, there was only a method using (3).

## ***Discussion***

The following are the 43 points.

$$\zeta[0.5002+ i9993939921.0437442408748145722 ]= -1.99116601917402... \times 10^{-19} + 3.268022212080576... \times 10^{-12} i$$

it to

$$\zeta[0.4998+ i9993939921.0437442408748145722 ]= 1.187204123757222... \times 10^{-12} - 3.059642519872608... \times 10^{-12} i$$

$$\zeta[0.5002+ i9993939924.316996311773215102560]= -3.304846896491618... \times 10^{-20} - 3.219317372227281... \times 10^{-12} i$$

it to

$$\zeta[0.4998+ i9993939924.316996311773215102560]= -4.305797681793088... \times 10^{-13} + 3.204186799199262... \times 10^{-12} i$$

$$\zeta[0.5002+ i9993939927.36432744580588190450]= 1.333641622459393... \times 10^{-18} - 4.609154807391208... \times 10^{-12} i$$

it to

$$\zeta[0.4998+ i9993939927.36432744580588190450]= 4.626821771888833... \times 10^{-12} - 1.328074131509433... \times 10^{-13} i$$

and

$$\zeta[0.5001+ i9993939921.2084054606676132386 ]= -1.665695174695487... \times 10^{-21} + 1.398630251415256... \times 10^{-10} i$$

it to

$$\zeta[0.4999+ i9993939921.2084054606676132386 ]= -3.22222459121213... \times 10^{-12} + 1.401226283877636... \times 10^{-10} i$$

$$\zeta[0.5001+ i9993939922.133690428645097939 ]= 2.364151777245584... \times 10^{-18} + 4.493668526836434... \times 10^{-12} i$$

it to

$$\zeta[0.4999+ i9993939922.133690428645097939 ]= 3.009098018648613... \times 10^{-12} + 3.350244026723062... \times 10^{-12} i$$

$$\zeta[0.5001+ i9993939922.68410902624915305553]= 8.22486144472526... \times 10^{-20} - 1.864863942873606... \times 10^{-11} i$$

it to

$$\zeta[0.4999+ i9993939922.68410902624915305553]= 3.21040439462464... \times 10^{-12} - 1.84103736112218... \times 10^{-11} i$$

$$\zeta[0.5001+ i9993939922.95025780885810928776]= -8.10196470888027... \times 10^{-19} + 4.048228901753472... \times 10^{-12} i$$

it to

$$\zeta[0.4999+ i9993939922.95025780885810928776]= -2.957355150867715... \times 10^{-12} + 2.777012689497242... \times 10^{-12} i$$

$$\zeta[0.5001+ i9993939923.37633601608433423527]= 2.569003845158657... \times 10^{-18} + 1.957554395870952... \times 10^{-12} i$$

it to

$$\zeta[0.4999+ i9993939923.37633601608433423527]= 1.838255851600554... \times 10^{-12} - 6.849139870951618... \times 10^{-13} i$$

$$\zeta[0.5001+ i9993939924.31699639165844333521]= 1.326894789350602... \times 10^{-19} - 1.61136470998491... \times 10^{-12} i$$

it to

$$\zeta[0.4999+ i9993939924.31699639165844333521]= -2.150590630698223... \times 10^{-13} + 1.600397374581985... \times 10^{-12} i$$

$$\zeta[0.5001+ i9993939925.01048086650221688803]= 1.199167877999123... \times 10^{-19} - 2.959930131586648... \times 10^{-12} i$$

it to

$$\zeta[0.4999+ i9993939925.01048086650221688803]= 2.705543492858225... \times 10^{-12} - 1.215904954143321... \times 10^{-12} i$$

$$\zeta[0.5001+ i9993939926.77094179073025316002]= -2.261940815902866... \times 10^{-19} - 2.30004539031767... \times 10^{-12} i$$

it to

$$\zeta[0.4999+ i9993939926.77094179073025316002]= 2.304325406948422... \times 10^{-12} - 5.251570545800909... \times 10^{-14} i$$

$$\zeta[0.5001+ i9993939927.36432748557259304354 ]= 4.504039517712567... \times 10^{-19} - 2.307020870504477... \times 10^{-12} i$$

it to

$$\zeta[0.4999+ i9993939927.36432748557259304354 ]= 2.310962157684847... \times 10^{-12} - 6.633514978061672... \times 10^{-14} i$$

$$\zeta[0.5001+ i9993939927.61600897555186247188 ]= 8.75172545311981... \times 10^{-19} + 1.696196416587873... \times 10^{-12} i$$

it to

$$\zeta[0.4999+ i9993939927.61600897555186247188 ]= -1.027034160127178... \times 10^{-12} - 1.354437353605761... \times 10^{-12} i$$

$$\zeta[0.5001+ i9993939927.99407821089152391954]= -3.268386023636211... \times 10^{-19} - 4.303682506287577... \times 10^{-12} i$$

it to

$$\zeta[0.4999+ i9993939927.99407821089152391954]= 2.988990219342737... \times 10^{-12} - 3.109062921540993... \times 10^{-12} i$$

$$\zeta[0.5001+ i9993939932.20497318765501243859]= 2.201942209231355... \times 10^{-20} + 6.661703105120269... \times 10^{-12} i$$

it to

$$\zeta[0.4999+ i9993939932.20497318765501243859]= 3.126939525237333... \times 10^{-12} + 5.89821907731327... \times 10^{-12} i$$

$$\zeta[0.5001+ i9993939933.1988413894535215188]= -8.25903848826723... \times 10^{-19} - 1.648528546847025... \times 10^{-12} i$$

it to

$$\zeta[0.4999+ i9993939933.1988413894535215188]= -7.129496705822906... \times 10^{-13} + 1.490264917835716... \times 10^{-12} i$$

$$\zeta[0.5001+ i9993939933.77591566207753009519]= -2.326005306090762... \times 10^{-20} - 1.740303332303191... \times 10^{-12} i$$

it to

$$\zeta[0.4999+ i9993939933.77591566207753009519]= -1.233818766521483... \times 10^{-12} + 1.232561567681348... \times 10^{-12} i$$

$$\zeta[0.5001+ i9993939934.0861954768413550869]= -1.67532026577169... \times 10^{-19} + 1.658202437620622... \times 10^{-12} i$$

it to

$$\zeta[0.4999+ i9993939934.0861954768413550869]= 7.894871543920821... \times 10^{-13} - 1.462197519311031... \times 10^{-12} i$$

$$\zeta[0.5001+ i9993939934.711971018436567452118]= 1.168221615178013... \times 10^{-18} + 1.615487076231884... \times 10^{-12} i$$

it to

$$\zeta[0.4999+ i9993939934.711971018436567452118]= -3.170011931574805... \times 10^{-13} - 1.587573983534854... \times 10^{-12} i$$

$$\zeta[0.5001+ i9993939935.2018847202487606775]= 7.208745201141981... \times 10^{-19} + 2.950917401021942... \times 10^{-12} i$$

it to

$$\zeta[0.4999+ i9993939935.2018847202487606775]= 2.701961468574367... \times 10^{-12} + 1.201788489714775... \times 10^{-12} i$$

$$\zeta[0.5001+ i9993939935.65235025669715192423]= -2.023383318666992... \times 10^{-20} - 1.998133630889629... \times 10^{-12} i$$

it to

$$\zeta[0.4999+ i9993939935.65235025669715192423]= 1.913466710834517... \times 10^{-12} + 5.900316293345005... \times 10^{-13} i$$

$$\zeta[0.5001+ i9993939937.84440878225164349628]= 3.581202509258201... \times 10^{-20} - 5.513511240025161... \times 10^{-12} i$$

it to

$$\zeta[0.4999+ i9993939937.84440878225164349628]= -3.082039027797377... \times 10^{-12} - 4.585731029062808... \times 10^{-12} i$$

$$\zeta[0.5001+ i9993939938.10198049871904997745]= 1.45987655714186... \times 10^{-19} - 1.376178767616132... \times 10^{-11} i$$

it to

$$\zeta[0.4999+ i9993939938.10198049871904997745]= 3.199979683375819... \times 10^{-12} - 1.341458737192134... \times 10^{-11} i$$

$$\zeta[0.5001+ i9993939938.33210048031400075449]= 5.782767317335079... \times 10^{-20} + 2.196991126774739... \times 10^{-12} i$$

it to

$$\zeta[0.4999+ i9993939938.33210048031400075449]= -2.196116322381721... \times 10^{-12} - 1.560122313527731... \times 10^{-13} i$$

$$\zeta[0.5001+ i9993939938.73336650007521599948]= 2.494022789490094... \times 10^{-19} + 5.651591325941315... \times 10^{-12} i$$

it to

$$\zeta[0.4999+ i9993939938.73336650007521599948]= 3.088924425285141... \times 10^{-12} + 4.747069047129066... \times 10^{-12} i$$

$$\zeta[0.5001+ i9993939939.39943948185906603531]= -3.606052630446428... \times 10^{-19} + 1.841361780037526... \times 10^{-12} i$$

it to

$$\zeta[0.4999+ i9993939939.39943948185906603531]= 1.571169989176768... \times 10^{-12} - 9.67696330515658... \times 10^{-13} i$$

$$\zeta[0.5001+i9993939939.66587267099915568134]= 2.71601636452515... \times 10^{-19} - 2.378065787121017... \times 10^{-12} i$$

it to

$$\zeta[0.4999+i9993939939.66587267099915568134]= -2.374275098528358... \times 10^{-12} - 2.05010331921093... \times 10^{-13} i$$

$$\zeta[0.5001+ i9993939940.28691747886261705731]= -2.432100600153484... \times 10^{-20} - 1.865938910362526... \times 10^{-12} i$$

it to

$$\zeta[0.4999+ i9993939940.28691747886261705731]= -1.635760473055422... \times 10^{-12} + 9.05980532789604... \times 10^{-13} i$$

$$\zeta[0.5001+ i9993939941.91092931301917614187]= 2.291281413062134... \times 10^{-19} + 2.818325789765108... \times 10^{-12} i$$

it to

$$\zeta[0.4999+ i9993939941.91092931301917614187]= -2.646409398493286... \times 10^{-12} + 9.86512569689199... \times 10^{-13} i$$

$$\zeta[0.5001+ i9993939942.37023031265993366053]= 9.39482604643253... \times 10^{-20} + 1.788489637910131... \times 10^{-12} i$$

it to

$$\zeta[0.4999+ i9993939942.37023031265993366053]= 1.412124431742938... \times 10^{-12} - 1.103713241363975... \times 10^{-12} i$$

$$\zeta[0.5001+ i9993939942.67702813314046386397]= -5.488511859929983... \times 10^{-20} - 1.708311409951137... \times 10^{-12} i$$

it to

$$\zeta[0.4999+ i9993939942.67702813314046386397]= -1.090138487128961... \times 10^{-12} + 1.319969138820999... \times 10^{-12} i$$

$$\zeta[0.5001+ i9993939942.92558880907845182041]= -3.151602760382641... \times 10^{-19} + 2.445735832621978... \times 10^{-12} i$$

it to

$$\zeta[0.4999+ i9993939942.92558880907845182041]= 2.428169892042524... \times 10^{-12} + 3.331898711528818... \times 10^{-13} i$$

$$\zeta[0.5001+ i9993939944.02340583811364702756]= 7.078431141187085... \times 10^{-20} - 7.391752442013767... \times 10^{-12} i$$

it to

$$\zeta[0.4999+ i9993939944.02340583811364702756]= 3.144784714472365... \times 10^{-12} - 6.706739267250274... \times 10^{-12} i$$

$$\zeta[0.5001+ i9993939944.922927097532494909408]= -8.36920207862474... \times 10^{-20} + 1.403811206682318... \times 10^{-11} i$$

it to

$$\zeta[0.4999+ i9993939944.922927097532494909408]= -3.200684788005513... \times 10^{-12} + 1.369894346387328... \times 10^{-11} i$$

$$\zeta[0.5001+i9993939945.13566110914365646800]= 2.564289514646034... \times 10^{-20} - 1.907054703281034... \times 10^{-12} i$$

it to

$$\zeta[0.4999+i9993939945.13566110914365646800]= 1.733406797437334... \times 10^{-12} + 8.04737411903959... \times 10^{-13} i$$

$$\zeta[0.5001+i9993939945.6953945363672228502]= -1.117409247148208... \times 10^{-18} - 1.645235093151696... \times 10^{-12} i$$

it to

$$\zeta[0.4999+i9993939945.6953945363672228502]= 6.858969391660914... \times 10^{-13} + 1.499279234794288... \times 10^{-12} i$$

$$\zeta[0.5001+i9993939946.65130523741001133093]= 1.446271034688832... \times 10^{-18} + 2.640863871750123... \times 10^{-12} i$$

it to

$$\zeta[0.4999+i9993939946.65130523741001133093]= -2.556192711164653... \times 10^{-12} + 6.853147762598621... \times 10^{-13} i$$

$$\zeta[0.5001+i9993939948.49847564306396755842]= 7.921586012890351... \times 10^{-21} - 2.49955321740595... \times 10^{-11} i$$

it to

$$\zeta[0.4999+i9993939948.49847564306396755842]= -3.215124893375674... \times 10^{-12} - 2.484135045134536... \times 10^{-11} i$$

$$\zeta[0.5001+i9993939950.04342883571596127442]= 9.87897055745907... \times 10^{-20} + 2.429154238447885... \times 10^{-12} i$$

it to

$$\zeta[0.4999+i9993939950.04342883571596127442]= 2.415458340124618... \times 10^{-12} + 3.023389105388274... \times 10^{-13} i \dots\dots\dots$$

$$\zeta[0.5001+i9993939950.63441381203016488901]= 7.025246953818844... \times 10^{-19} + 2.493262714973522... \times 10^{-12} i$$

it to

$$\zeta[0.4999+i9993939950.63441381203016488901]= 2.462755014494791... \times 10^{-12} + 4.214193291874185... \times 10^{-13} i.....$$

$$\zeta[0.5001+i9993939952.20797350362752741419]= -4.027997170608915... \times 10^{-19} - 1.614225444923271... \times 10^{-12} i$$

it to

$$\zeta[0.4999+i9993939952.20797350362752741419]= 2.949994901264755... \times 10^{-13} + 1.590523247536741... \times 10^{-12} i$$

$$\zeta[0.5001+i9993939953.46543826675418595550]= -3.423671010307271... \times 10^{-20} - 2.425933501883387... \times 10^{-12} i$$

it to

$$\zeta[0.4999+i9993939953.46543826675418595550]= 2.412943982915394... \times 10^{-12} - 2.963878955359292... \times 10^{-13} i$$

$$\zeta[0.5001+i9993939953.76374263971196047350]= -4.685899248681411... \times 10^{-20} + 2.47831567537666... \times 10^{-12} i$$

it to

$$\zeta[0.4999+i9993939953.76374263971196047350]= -2.452118903955709... \times 10^{-12} + 3.940094641783884... \times 10^{-13} i$$

$$\zeta[0.5001+i9993939956.80671262564299618347]= 3.66408274113052... \times 10^{-19} - 1.405720778474915... \times 10^{-11} i$$

it to

$$\zeta[0.4999+i9993939956.80671262564299618347]= -3.200467525447626... \times 10^{-12} - 1.371864502381664... \times 10^{-11} i$$

$\zeta[0.5001+i9993939957.47680306598278237670]= 1.538945358451901... \times 10^{-18} - 2.004959998563671... \times 10^{-12} i$

it to

$\zeta[0.4999+i9993939957.47680306598278237670]= -1.925613901795844... \times 10^{-12} + 5.735380620629792... \times 10^{-13} i$

For these 43 Counterexamples, reference 5 was used.

## ***References***

1. Riemann, Bernhard (1859). "Ueber die Anzahl der Primzahlen unter einer gegebenen Grösse".
2. John Derbyshire, Prime Obsession: Bernhard Riemann and The Greatest Unsolved Problem in Mathematics, Joseph Henry Press,2003, ISBN 9780309085496.
- 3) [https://en.wikipedia.org/wiki/Riemann\\_hypothesis](https://en.wikipedia.org/wiki/Riemann_hypothesis)
- 4) Toshiro Takami, Simulation of nontrivial point of Riemann zeta function. viXra: 1901.0432
- 5) Toshiro Takami, Consideration of Riemann Hypothesis 43 Counterexamples. viXra: 1903.0157



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mmm82889@yahoo.co.jp I would like to receive an email. I will not answer the phone.

Currently 57 years old Born on November 26, 1961

(I am very poor of English. Almost all document are google-translation. ) When converted to English by Google translation, it becomes cryptic to me.

But, I read letter by google translation. In my case, if you translate it into English by google translation, I do not know what is written in my paper. For me, foreign languages such as English (actually not good at Japanese) is a demon. As soon as it is translated into English, it turns into a cipher for me.

postscript

The cold when I found the first one is still continuing now and this may be my last post. I may have discovered another by surging my energy and it may not be counter example. It may be written as a will.

I am writing this at the limit of power. I write this with spitting blood. I will post it in a hurry, as long as I have not done it before I die.

Postscript

Until now, I have failed many times and it seems useless this time, but this time I have absolute confidence. Perhaps I will die today or tomorrow. I will write it as my will.

Also, for children's tuition, write as a will.

Although I could do mathematics, but I could not do anything afterwards, continued to be deceived by people, who did not understand the heart of men, only failed in life, as a will of repentance of a man who sent a life of anguish leave.

The prize money of 100 million yen is given to my two children.

postscript

The following items were attached to the title, but it disappeared now.

ζ Star man, appearing in my dream and say it. " $\cos[x*\ln1] / 1^a - \cos[x*\ln2].....$  "

Infinite next is 0 Therefore, .....

There are many ways to prove Riemann hypothesis. However, I think that this is the only way that Earthling can understand.

postscript

I will put out before my life goes down. I did the last inspection. Please give all the prize money to my child.

postscript

Please compile properly. I am very poor of English. Thanking you in advance. postscript I do not understand English translated into English by google translation, I translate again into Japanese by google translation again, and I can not understand the translation.