The method of representing Goldbach conjecture by set

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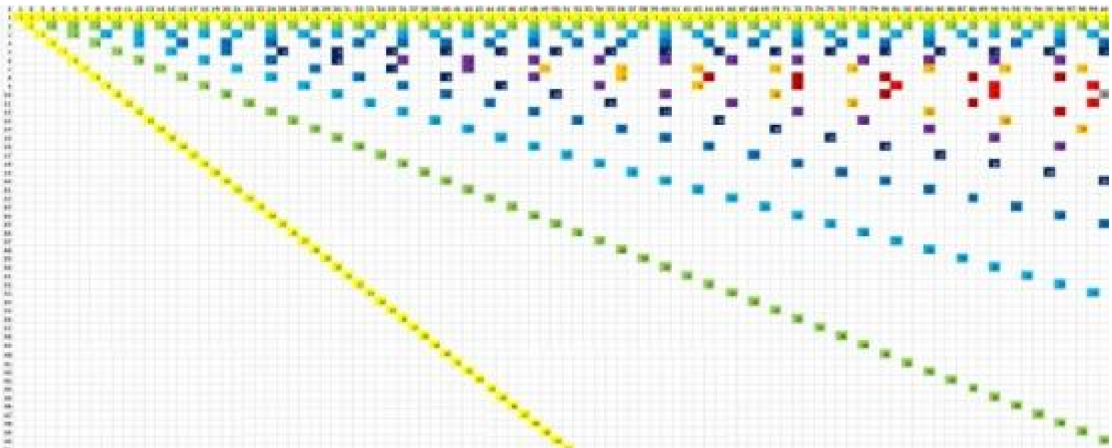
Abstract: If the Goldbach conjecture can be represented by a set, then the Goldbach conjecture is only one of the common mapping relations represented by a certain set in a wider range. In order to prove that I'm not kidding, I'll write the method of prime distribution image in the first paragraph of the article. This is easy to verify. You can know it's true by drawing it.

Key words: Set, Goldbach conjecture, distribution of prime numbers.

Find out the method of prime number distribution. 1. Draw a plane coordinate system and write numbers on the number axis. 2. Arbitrarily select a coordinate axis and draw parallel lines parallel to another coordinate axis based on the points with numbers on this coordinate axis. 3. Draw infinite points on the parallel lines based on the points on this coordinate axis and the values of the numbers on this coordinate axis as intervals on each parallel line. 4, Erase the slash with an angle of 45 ° with the coordinate axis. 5. On another coordinate axis, you will find the number on this coordinate axis. If there is no corresponding point, then the number is prime. If there is a corresponding point, then the number marked by these corresponding points is its divisor. 6. If you want to find all the divisors of this number, you have to redraw the 45 ° slash that has been erased.

Finally, the prime distribution you draw should be similar to the following picture, but the color mark in this picture is another way to express it. I won't say it here. If you are interested, you can study it yourself.



In addition, this picture can give us a message,

1，S is a positive integer, p_k is primes, $n_k \to \infty$ ， $\Rightarrow \prod_{k=1}^{\infty}(p_k{}^{+s*n_k}) =$

$$\prod_{k=1}^{\infty}\left[\frac{(p_k{}^{+s*(n_k+1)}-1)}{(p_k{}^{+s}-1)} \Big/ \frac{(p_k{}^{-s*(n_k+1)}-1)}{(p_k{}^{-s}-1)}\right] = \frac{\sum_{m=1}^{\infty}(m^{+s})}{\sum_{m=1}^{\infty}(m^{-s})}.$$

So, now I'm going to talk about the relationship between sets and prime numbers. Let's define the following sets,

$R_1^0 = \{a_1^1, a_1^2, a_1^3, a_1^4, \ldots\}$,$\{a_1^1\} \cap \{a_1^2\} \cap \{a_1^3\} \cap \{a_1^4\} \cap \ldots = \{a_1^1\}$,

$R_1^1 = \{a_1^1, a_2^1, a_3^1, a_4^1, \ldots\}$,$\{a_1^1\} \cap \{a_2^1\} \cap \{a_3^1\} \cap \{a_4^1\} \cap \ldots = \{a_1^1\}$,

$R_1^0 \cup R_1^1 = R_1^0$, $R_1^0 \cap R_1^1 = R_1^1$.

Then we can come to this conclusion, $\forall, a_1^b, a_1^c, a_1^d \in R_1^0, \ \forall, a_u^1, a_v^1, a_w^1 \in R_1^1, \ \Rightarrow \exists, a_1^b \cap a_1^c = a_u^1, \exists, \ a_v^1 \cup a_w^1 = a_1^d$.

In view of this, we can find that if $\oplus\!\!\rightarrow$ represents the mapping relationship, we can draw this conclusion, $\forall, a_1^m, a_1^n \in R_1^0, \ \forall, a_x^1, a_y^1 \in R_1^1, \Rightarrow \exists, a_1^m \oplus\!\!\rightarrow a_1^n = a_x^1 \oplus\!\!\rightarrow a_y^1$.

So, if there is such a definition,

$R_1^1 = \{a_1^1, a_2^1, a_3^1, a_4^1, \ldots\}$,$\{a_1^1\} \cap \{a_2^1\} \cap \{a_3^1\} \cap \{a_4^1\} \cap \ldots = \{a_1^1\}$,

$R_1^2 = \{a_1^2, a_2^2, a_3^2, a_4^2, \ldots\}$,$\{a_1^2\} \cap \{a_2^2\} \cap \{a_3^2\} \cap \{a_4^2\} \cap \ldots = \{a_1^1, a_1^2\}$,

$R_1^2 \cup R_1^1 = R_1^2$, $R_1^2 \cap R_1^1 = R_1^1$.

We found that there can still be, $\forall, a_b^2, a_c^2, a_d^2 \in R_1^2, \ \forall, a_u^1, a_v^1, a_w^1 \in R_1^1, \ \Rightarrow \exists, a_b^2 \cap a_c^2 = a_u^1, \exists, \ a_v^1 \cup a_w^1 = a_d^2$.

$\forall, a_m^2, a_n^2 \in R_1^2, \ \forall, a_x^1, a_y^1 \in R_1^1, \Rightarrow \exists, a_m^2 \oplus\!\!\rightarrow a_n^2 = a_x^1 \oplus\!\!\rightarrow a_y^1$.

So, if we define,

$R_1^0 = \{a_1^1, a_1^2, a_1^3, a_1^4, \ldots\}$,$\{a_1^1\} \cap \{a_1^2\} \cap \{a_1^3\} \cap \{a_1^4\} \cap \ldots = \{a_1^1\}$,

$R_1^1 = \{a_1^1, a_2^1, a_3^1, a_4^1, \ldots\}$,$\{a_1^1\} \cap \{a_2^1\} \cap \{a_3^1\} \cap \{a_4^1\} \cap \ldots = \{a_1^1\}$,

$R_1^2 = \{a_1^2, a_2^2, a_3^2, a_4^2, \ldots\}$,$\{a_1^2\} \cap \{a_2^2\} \cap \{a_3^2\} \cap \{a_4^2\} \cap \ldots = \{a_1^1, a_1^2\}$,

$R_1^3 = \{a_1^3, a_2^3, a_3^3, a_4^3, \ldots\}$,$\{a_1^3\} \cap \{a_2^3\} \cap \{a_3^3\} \cap \{a_4^3\} \cap \ldots = \{a_1^1, a_1^3\}$,

$R_1^4 = \{a_1^4, a_2^4, a_3^4, a_4^4, \ldots\}$,$\{a_1^4\} \cap \{a_2^4\} \cap \{a_3^4\} \cap \{a_4^4\} \cap \ldots = \{a_1^1, a_1^4\}$,

$\cdots\cdots$

$R_1^0 \cup R_1^1 \cup R_1^2 \cup R_1^3 \cup R_1^4 \cdots = R_1^0$, $R_1^0 \cap R_1^1 \cap R_1^2 \cap R_1^3 \cap R_1^4 \cdots = R_1^1$.

So we found that it can still be, $\forall, a_1^b, a_1^c, a_1^d \in R_1^0, \ \forall, a_u^1, a_v^1, a_w^1 \in R_1^1, \ \Rightarrow \exists, a_1^b \cap a_1^c = a_u^1, \exists, \ a_v^1 \cup a_w^1 = a_1^d$.

$\forall, a_1^m, a_1^n \in R_1^0, \ \forall, a_x^1, a_y^1 \in R_1^1, \Rightarrow \exists, a_1^m \oplus\!\!\rightarrow a_1^n = a_x^1 \oplus\!\!\rightarrow a_y^1$.

If we replace $\oplus\!\!\rightarrow$ with $+$, then this equation is equivalent to Goldbach's conjecture.

Reference: none.

用集合表示哥德巴赫猜想的方法

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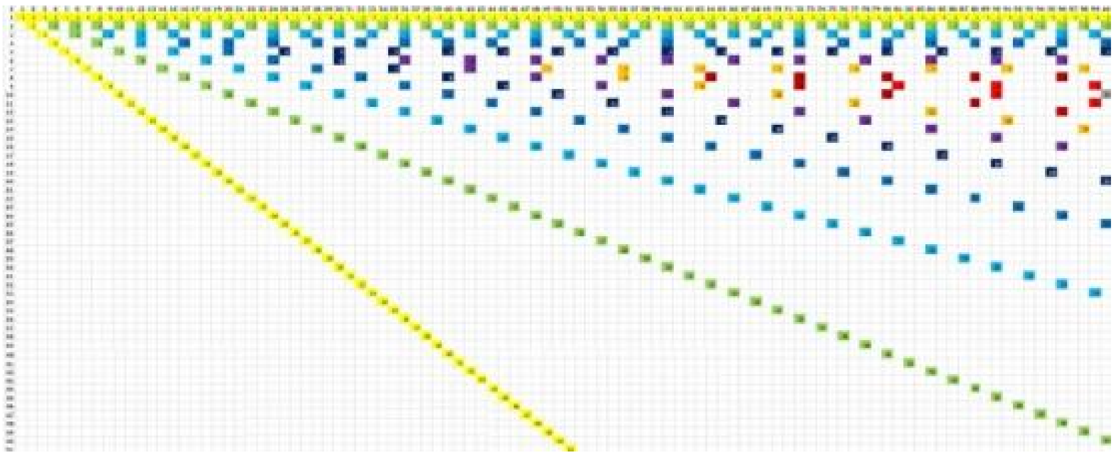
摘要：如果可以用集合表示哥德巴赫猜想，那么哥德巴赫猜想就只是更大范围内的某种集合表示的其中一种的普通映射关系。为了证明我不是在开玩笑，我会在文章第一段话写出素数分布的图像的方法，这个很容易验证，你画一下就知道是真的了。

关键词：集合，哥德巴赫猜想，素数的分布。

找出素数分布的方法，1，画出平面坐标系，数轴上写上数字，2，任意选择一个坐标轴，以这个坐标轴上写上数字的点为基础，画出平行于另一个坐标轴的平行线，3，在每个平行线上以这个坐标轴上的点为基础，以这个坐标轴上的数字的数值作为间隔，在平行线上画出无限个点，4，擦掉和坐标轴夹角为 45° 的斜线，5，在另一个坐标轴上，你会发现这个坐标轴上的数字，如果没有对应点，那么这个数字就是素数，如果有对应点，那么，这些对应点标记的数字，就是它的约数，6，如果你想找的这个数字的全部约数，那你就得把曾经擦掉的 45° 的斜线重新画出来。

最后你画出来的素数分布应该类似于下面这张图片，但是这张图中的颜色标记又是另外一种表示方式了，这里就不另外说了。如果你有兴趣的话，可以自己研究一下。



另外，这张图可以给我们一个信息，

1，S 表示正整数，p_k表示素数，$n_k \to \infty$ ， $\Rightarrow \prod_{k=1}^{\infty}(p_k^{+s*n_k}) = \prod_{k=1}^{\infty}[\frac{(p_k^{+s*(n_k+1)}-1)}{(p_k^{+s}-1)} / \frac{(p_k^{-s*(n_k+1)}-1)}{(p_k^{-s}-1)}] = \frac{\sum_{m=1}^{\infty}(m^{+s})}{\sum_{m=1}^{\infty}(m^{-s})}$。

那么，现在我就要说集合和素数的关系了。

假设定义以下集合，

$R_1^0 = \{a_1^1, a_1^2, a_1^3, a_1^4, ...\}$,$\{a_1^1\} \cap \{a_1^2\} \cap \{a_1^3\} \cap \{a_1^4\} \cap ... = \{a_1^1\}$，

$R_1^1 = \{a_1^1, a_2^1, a_3^1, a_4^1, \dots\}$,$\{a_1^1\} \cap \{a_2^1\} \cap \{a_3^1\} \cap \{a_4^1\} \cap \dots = \{a_1^1\}$,

$R_1^0 \cup R_1^1 = R_1^0$，$R_1^0 \cap R_1^1 = R_1^1$。

那么，我们就可以得出这个结论，$\forall, a_1^b, a_1^c, a_1^d \in R_1^0$，$\forall, a_u^1, a_v^1, a_w^1 \in R_1^1$，$\Rightarrow \exists, a_1^b \cap a_1^c = a_u^1, \exists, a_v^1 \cup a_w^1 = a_1^d$。

针对这个，我们可以发现，如果$\oplus$表示映射关系，那么我们就可以得出这个结论，

$\forall, a_1^m, a_1^n \in R_1^0$，$\forall, a_x^1, a_y^1 \in R_1^1, \Rightarrow \exists, a_1^m \oplus a_1^n = a_x^1 \oplus a_y^1$。

那么，如果有这样一个定义，

$R_1^1 = \{a_1^1, a_2^1, a_3^1, a_4^1, \dots\}$,$\{a_1^1\} \cap \{a_2^1\} \cap \{a_3^1\} \cap \{a_4^1\} \cap \dots = \{a_1^1\}$,

$R_1^2 = \{a_1^2, a_2^2, a_3^2, a_4^2, \dots\}$,$\{a_1^2\} \cap \{a_2^2\} \cap \{a_3^2\} \cap \{a_4^2\} \cap \dots = \{a_1^1, a_1^2\}$,

$R_1^2 \cup R_1^1 = R_1^2$，$R_1^2 \cap R_1^1 = R_1^1$。

我们发现，仍然可以有，$\forall, a_b^2, a_c^2, a_d^2 \in R_1^2$，$\forall, a_u^1, a_v^1, a_w^1 \in R_1^1$，$\Rightarrow \exists, a_b^2 \cap a_c^2 = a_u^1, \exists, a_v^1 \cup a_w^1 = a_d^2$。

$\forall, a_m^2, a_n^2 \in R_1^2$，$\forall, a_x^1, a_y^1 \in R_1^1, \Rightarrow \exists, a_m^2 \oplus a_n^2 = a_x^1 \oplus a_y^1$。

那么，如果我们定义，

$R_1^0 = \{a_1^1, a_1^2, a_1^3, a_1^4, \dots\}$,$\{a_1^1\} \cap \{a_1^2\} \cap \{a_1^3\} \cap \{a_1^4\} \cap \dots = \{a_1^1\}$,

$R_1^1 = \{a_1^1, a_2^1, a_3^1, a_4^1, \dots\}$,$\{a_1^1\} \cap \{a_2^1\} \cap \{a_3^1\} \cap \{a_4^1\} \cap \dots = \{a_1^1\}$,

$R_1^2 = \{a_1^2, a_2^2, a_3^2, a_4^2, \dots\}$,$\{a_1^2\} \cap \{a_2^2\} \cap \{a_3^2\} \cap \{a_4^2\} \cap \dots = \{a_1^1, a_1^2\}$,

$R_1^3 = \{a_1^3, a_2^3, a_3^3, a_4^3, \dots\}$,$\{a_1^3\} \cap \{a_2^3\} \cap \{a_3^3\} \cap \{a_4^3\} \cap \dots = \{a_1^1, a_1^3\}$,

$R_1^4 = \{a_1^4, a_2^4, a_3^4, a_4^4, \dots\}$,$\{a_1^4\} \cap \{a_2^4\} \cap \{a_3^4\} \cap \{a_4^4\} \cap \dots = \{a_1^1, a_1^4\}$,

……

$R_1^0 \cup R_1^1 \cup R_1^2 \cup R_1^3 \cup R_1^4 \cdots = R_1^0$，$R_1^0 \cap R_1^1 \cap R_1^2 \cap R_1^3 \cap R_1^4 \cdots = R_1^1$。

那么，我们发现，仍然可以有，$\forall, a_1^b, a_1^c, a_1^d \in R_1^0$，$\forall, a_u^1, a_v^1, a_w^1 \in R_1^1$，$\Rightarrow \exists, a_1^b \cap a_1^c = a_u^1, \exists, a_v^1 \cup a_w^1 = a_1^d$。

$\forall, a_1^m, a_1^n \in R_1^0$，$\forall, a_x^1, a_y^1 \in R_1^1, \Rightarrow \exists, a_1^m \oplus a_1^n = a_x^1 \oplus a_y^1$。

我们如果把$\oplus$换成＋，那么这个等式就等价于哥德巴赫猜想。

参考文献：无。