

Wiles didn't understand Fermat's last theorem:
"a huge joke"

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*Dedicated to Prof.R.M.Santilli on the occasion of
his 70-th Birthday*

In 1637 Fermat wrote a famous theorem and it denotes in mathematics:

$$x^n + y^n = z^n \quad (1)$$

When $n=2$, it is Pythagora's theorem, and the equation (1) has infinitely many integer solutions, while its minimum solution is $3^2+4^2=5^2$. When $n>2$, it is called Fermat's last theorem. All the mathematicians have been puzzled by this theorem over a period of 350 years, for it is just a calculative problem, so it can only be proved one by one.

We firstly make up a joke in order to illuminate that Wiles didn't understand Fermat's last theorem at all, also everyone can find out how Wiles proves. When husband goes out for work, his wife is worried about his health at home. Frey puts the husband hat on wife head, and puts the husband clothing and trousers on wife body. After Ribet's earnest research, he said, you can substitute your husband completely. If you are not at ease, you can do a check-up. Then Wiles checks her by medical appliances, said, you are very healthy, and your husband is also very healthy (Wiles doesn't touch her husband body at all), you can be at ease. The news is passed one by one, then everyone in all of the world knows that her husband is in good condition. In the same way, they put the wife hat on husband head, and put the wife clothing and trousers on husband body, so that husband health can substitute wife one, therefore they get the same ridiculous conclusion. However, it has no relation between wife health and husband one, because they are two creatures of two different genders.

We define Fermat's last theorem (It is similar to husband)

$$A^n + B^n = C^n \quad (2)$$

where $n > 2$, equation (2) has no integer solutions.

We define elliptic curve (It is similar to wife)

$$y^2 = x^3 + ax^2 + bx + c \quad (3)$$

where a, b, c are integers.

In 1984 Frey puts [1] Fermat's last theorem hat A^n on elliptic curve head, and puts Fermat's last theorem clothing B^n on elliptic curve body, but he didn't put the Fermat's last theorem trousers C^n on elliptic curve body. It is called Frey elliptic curve (It is similar to the wife who wears husband hat and clothing)

$$y^2 = x^3 + (A^n - B^n)x^2 - A^n B^n x \quad (4)$$

In 1986 Ribert[2] proved that Frey elliptic curve could substitute Fermat's last theorem completely. It is just the same as that wife can substitute husband to have physical examination. With the elliptic curve tool, Wiles[3,4] proved that Frey elliptic curve was semistable, i.e. the Fermat's last theorem is right (he didn't discuss Fermat's last theorem at all in his papers of 130 pages[3,4]), as Frey elliptic curve is healthy, then Fermat's last theorem is also healthy, which is the same as that wife is in good condition then her husband is also healthy. Wiles proved Fermat's last theorem in this way. Then the news is passed one by one broadly, the mathematicians of the whole world all said that Wiles proved Fermat's last theorem. In the same way they put elliptic curve hat on Fermat's last theorem head, and put elliptic curve clothing and trousers on Fermat's last theorem body, so that Fermat's last theorem can substitute the elliptic curve, therefore they get the same ridiculous conclusion. However, it has no relation between them, because they are two totally different equations. This is "a huge joke", and it consists of very complicated mathematics and a mass of mathematic symbols, while no one can see its rips. **By** this "a huge joke" Wiles gained the ten top international mathematics awards[5].

References

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