Chunxuan Jiang—A Tragic Chinese Mathematician

This article is written by professor Zhenghai Song

Chunxuan Jiang is a tragic mathematician in the history of modern mathematics. In China Jiang's work was completely repelled and been considered as pseudoscience. Jiang dedicates his work to Alma Mater (Beihang University) and China which rejected.

Below are some achievements claimed by Jiang himself, which has not been acknowledged. Jiang took great interest in number theory and has been dedicated to the study of it in his spare time since 1973. He paid much attention to communicate with mathematicians both home and abroad. Through his 30 years' hard work, he achieved remarkable achievements in number theory, successfully solving several well-acknowledged tough mathematical problems using new mathematical methods: (1) Extended trigonometric function to prove the Fermat's Last Theorem; (2) Finding the Jiang's function *Jn(ω)* which reveals the nature of distribution of the prime number, thus proving the Goldbach Conjecture; (3) Denied the Riemann hypothesis; (4) developed the Isonumber theory and established mathematic system of Isonumber.

However, Jiang's work has not been recognized of Isonumber theory. Staff in the ***Chinese Academy of Sciences*** considered Jiang as an amateur, As a result, Jiang underwent long-term prejudice which was beyond expression: he was refused when he sent his paper to the authority in mathematics for advice; some authorities in mathematics even deem Jiang's paper as *'rubbish'*, some said that Jiang's study on number theory is something like *'going to the moon by a bicycle'*; editors in some famous mathematic journal in China rejected all papers submitted by Jiang. ***Yu Xinhe Mathematics Seminar*** held in 1995, Jiang and his paper's title was originally listed in the first place in the schedule. However, Jiang was told that his presentation had been cancelled.

Professor Santilli, the founder of hadronal theory, mathematician as well as editor of ***Algebra•Group•Geometric***, attached highly importance to the papers sent by Jiang. The journal published Jiang's papers successively and published a monographic series on Jiang's number theory. In a letter Santilli wrote to Jiang, he said: 'I think you are ***'the leader of a new number theory'*** and I would like to take the opportunity to praise your work's potential value in the history of mathematics.' The editor-in-chief, George Weiss, when interviewed by *Science and Technology Daily*, deemed that: 'Jiang's work is innovative and of great importance. As far as all the mathematical reviews we've collected, Jiang's work has been examined by various mathematicians and they all deem Jiang as one of the most important scientist in number theory.'.

Lack of original and innovative output has troubled the leaders in the scientific and technological circles of China. And lots of discussion has been conducted to find reasons why mainland Chinese elites were not lucky enough to win a *Nobel Prize*. However, the ***"flower blooms lonely inside but was admired the fragrance outside"*** phenomenon happened again in reality, which is very thought-provoking. The *Science and Technology Daily* published an article named: ***'Was him (Jiang) whimsically want to go to the moon by a bicycle?'*** The article reported Jiang's achievements and his injustice suffering in China. The academia was shocked and Jiang himself as well as his works triggered hot debate. Meanwhile, the ***Tiandirensheng Academic Lecture***, a non-profit organization aiming to promote the original and innovative development of China's science and technology as well as to create an academic contending atmosphere in China, held its 429th lecture on November 10, 2001 with a special seminar concerning *'Chunxuan Jiang phenomenon'*. The experts present at the seminar gave high evaluation of Jiang's academic work,

which demonstrated sympathy and strong support while he was repelled by the domestic peers. In order to further the debate, the ***Tiandirensheng Academic Lecture*** held its 439th lecture on December 5, 2001 with the topic *'query on Chunxuan Jiang phenomenon'*. Jiang's achievements on number theory were various.

It is very interesting and strange that up to now those who doubted Jiang's work cannot point out the omissions or errors in Jiang's published papers and monographs. They just tried hard to argue that the journal that published Jiang's paper were not authoritative. That is to say, although no authorities in China pointed any errors in Jiang's work in the field of number theory, yet they remain highly intolerant towards Jiang.

In August 2002, the International Congress of Mathematicians (ICM) was held in Beijing. Jiang was rejected for his presentation at the conference.

Why did Jiang's works receive immeasurably difference remarks within China and abroad? We should really treat it seriously. This reflected from a deep level that the insufficient administrative system in China, which lacks proper ways to prompt the initial innovation and to guarantee the academic achievements receive impartial review. More importance should be laid on the peer review and fully utilize the potential of experts. However, there existed insufficient awareness, measures and legal sanction for those who misuse his power to safeguard their own reputation and status and repel innovation. This may pose negative influence on the development of China's science and technology. Once Jiang's work is officially established, it may change the whole current situation in mathematics in China, which may be a milestone leading to the future of mathematics. What's more, the so called *'Chunxuan Jiang phenomenon'* calls for thorough reform of administrative reform in science and technology. National prosperity put an urgent need on innovative elites and outputs. We strongly believe that as long as we stick to the reform and opening up policy, continuously establish and develop the incentive mechanism of innovation and invention, to create fine humanities and social environment for scientific innovation, the talent and achievements will constantly emerge. ***Mathematics Reviews***, a world most famous mathematics magazine, introduced Jiang's mathematical treatise. It is surprising that Jiang's work should be introduced by *Mathematics Reviews*, because Jiang's work was regarded as *rubbish* by some experts in China. People, however, also noticed that *Mathematics Reviews* did not make any comments on Jiang's work, and the ambiguity remained intriguing: on one hand, if Jiang's work is *worthless rubbish*, why did *Mathematics Reviews* bother to introduce it? On the other hand, if Jiang's work is correct, why didn't Mathematics Reviews make some positive comments? It is really elusive. Is it really that difficult for the contemporary experts to tell the true value of Jiang's achievements? Or shall we rely on the future generations to judge Jiang's work?

Scientists have national boundaries. Russia's important mathematical papers were written by Russian mathematicians to be reviewed in the *Mathematics Reviews*. In the same way, Jiang's work should be written by Chinese mathematicians to be reviewed in the *Mathematics Reviews*. Pitifully, until now, authorities in mathematics in China still refuse to acknowledge Jiang's work, even the *Chinese Mathematics Abstract* refused to introduce Jiang's treatise, which is somehow, an epochal work. All remain silence except people in *Mathematics Reviews*, who thought thy bear the responsibility to introduce Jiang's work, considering its importance.

Jiang is a highly controversial figure in science domain. Since the *Science and Technology Daily* published an article named: *'Was him(Jiang) whimsically want to go to the moon by a bicycle?'* in the first edition in October 25, 2001, the ***Tiandirensheng Academic Lecture*** in *The*

Institute for the History of Natural Science, Chinese Academy of Sciences held three more seminars to discuss Jiang's phenomenon. The discussion of Jiang's phenomenon had even been listed as one of the test questions for entrance examination for master degree in *The Institute for the History of Natural Science, Chinese Academy of Sciences* in the year 2002. In the middle of July, Jiang called in and told the journalists with excitement that his treatise, issued by ***American International Science Press***, had been included by American famous *Mathematics Reviews*. In one of *Mathematics Reviews* issued in March 2004, Jiang's name and the title of his book ***Foundation of Santilli's Isonumber Theory-with Application to New Cryptograms, the Fermat's Last Theorem and the Goldbach's Conjecture***, were listed number one in the catalog of number theory: MR2004c:11001, followed by some famous books on number theory. *Goldbach Conjecture*, a book written by Yuan Wang, a academician in *Chinese Academy of Sciences*, was listed 187th in the catalog of number theory: MR2004c: 11187. Was it amazing that Jiang, a so-called amateur mathematician can contribute to a book that listed *No.1* in *Mathematics Reviews*! He didn't use one penny of Chinese scientific research funds! Jiang's book may be the future for the mathematics, and if you want to be a mathematician in 21st century, you can be inspired from this book. Paul Erdős once said: 'It will be another million years, at least, before we understand the primes'. Leonhard Euler once said: 'mathematicians have tried in vain to discover some order in the sequence of prime numbers but we have every reason to believe that there are some mysterious which the human mind will never penetrate.' Jiang, by introducing Jiang's functions, solved most of the problems related to the distribution of the prime number, so as to uncover the mysterious of prime number for humankind. He used several ways to prove the *Goldbach Conjecture*, three methods to negate the *Riemann hypothesis* and fifty ways to solve the *Fermat's Last Theorem*. He obtained new functions from the process, which provide excellent mathematical tool for human to further understand and reform nature that can be used for a long time.

Mathematics Reviews also mentioned that Santilli wrote the foreward for Jiang's book. Santilli wrote: 'I would like also to congratulate Professor Jiang for the simply monumental work he has done in this monograph, work that, to my best knowledge, has no prior occurrence in the history of number theory in regard to joint novelty, dimension, diversification, articulation and implications.'

Jiang was regarded *"dangerous"* by some mathematicians. Besides Jiang claimed he solve the the *Goldbach Conjecture* and the *Fermat's Last Theorem*, he also negated the *Riemann hypothesis*, which is the foundation of modern number theory.

In 2002, the *International Congress of Mathematicians (ICM)* was held in China and Jiang wasn't invited. Santilli spare no effort to propagandize Jiang's work in a satellite session in Hong Kong. He said at an email to Jiang: 'at the *International Congress of Mathematicians (ICM)*, I do introduce your work as the *'real revolution, one that resulted in the decline and fall of traditional number theory'*. The *Tiandirensheng Academic Lecture* held its 439th lecture on December 5, 2001 with the topic *'query on Chunxuan Jiang phenomenon'*. In 1993, Santilli announced to the public his Isonumber theory, the foundation of his Isonumber mathematical system and hope all the mathematicians in the world can pay attention to it. Jiang finally completed Santilli's Isonumber theory modern mathematics is a special case of Isonumber mathematical system. In order to show appreciation, Santilli decided to publish all Jiang's work in America and mathematicians around the world all have access to the book.

The book can be obtained on the website: http://www.i-b-r.org/docs/jiang.pdf. Santilli paid a

visit to the *Institute of Mathematics, Chinese Academy of Sciences*, and upon his return back in America, he wrote a letter to Jiang to suggest him write a book. Like Euler, Gauss, Newton, Einstein, Jiang worked on his own. This is partly because they were all engaged in innovative and peering work; there was nowhere to seek cooperation. As a controversial figure and his achievements, one has the right to choose to not believe, but one does not have the right and shall not label him as pseudoscience.

Email received with the notification that Jiang was the Gold medal winner of *Telesio -Galilei Academy of Science* in 2009. As was reported by the news in *Reuters*, the award is of international domain. It was awarded to the person who makes an outstanding contribution to the fields of science, medicine, social science. Therefore the awards attracted attention internationally.

The original awards announcement is as follows:

Telesio -Galilei Academy of Science，Gold medal winners 2009：Jiang Chunxuan is known for the developed of new number theoretic tools to help in the solution of known fundamental problems in number theory. The fundamental motivation of Jiang to develop a number theory different from the one with which most are familiar results from recent claim that the Riemann Hypothesis, which lies at the foundations of all prime number theories, is false, that all calculations done to improve it are false, and that the entire speculative theory done through it is false. Also, he has taken on board many of the mathematical ideas associated with hadronic mathematics as proposed by Santilli. He has made contributions to Isonumber theory which is developed as a result of contact with Santilli. However, probably, his greatest achievement lies in proof of Fermat's last theorem – something still to receive wide recognition.

Note1: in 1967, Jiang found a *new gravitational formula* which can replace the *Newton gravitational formula*. Professor Walter Lewin in MIT said that: ‘publish the new gravitational formula in a refereed journal and once it is accepted buy yourself a first class ticket to Stockholm to pick up Nobel prize for physics.’ But authorities in China did not support the new gravitational formula and refused to publish it. Later the Physics Letters B has accepted Jiang’s paper of the new gravitational formula. However, some Chinese wrote to the editor of the Physics Letters B, strongly against the publication of Jiang’s paper. Because China need not Nobel prize.

Note2:Fermat last theorem has been completely solved by British mathematician Andrew Wiles in 1994.

Edited in News Flash on Tiandirensheng Academic Lecture

14-226 of total 1903 (five pages totally) (14/11/2014) [issued in www.baoway.com]

Editor in chief: Zhenghai Song (The Institute for the History of Natural Science, Chinese Academy of Sciences)

****

Chunxuan Jiang, a person explores the nature in his own unique way. He didn't care other people's way of exploring the nature, which is the reason he seldom referenced other people's work.