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WORLD'S BEST MATHEMATICIANS IN HONG KONG TO TACKLE 350-YEAR-OLD RIDDLE

Nearly two-thirds of the world's top mathematicians in number theory are gathering at the Chinese University of Hong Kong this week in a bid to help to complete a proof of Fermat's Last Theorem -- a problem which has challenged the scientific community for 350 years but was declared proven except for some details by Prof. Andrew Wiles a short while ago.

"Many famous institutes have offered prizes for the person who can solve this outstanding problem. Many 'proofs' were declared in the past. None stood up to the full weight of mathematical rigor. Six months ago, Dr. Andrew Wiles of Princeton University came forward with the first serious proof accepted by mathematicians." said Prof. Yau Shing-tung, co-director of the newly-launched Institute of Mathematical Sciences of the Chinese University of Hong Kong.

Prof. Yau -- the first Chinese to win the Nobel-equivalent Fields Medal in 1982 for his ingenious solution to the Calabi's Conjecture -- is the convenor of the conference which gathers 13 others of the world's leading mathematicians from Britain, the U.S., Germany, France and Russia.

Fermat's Last Theorem concerns the equation of $x^n + y^n = z^n$. When n equals to 2, it becomes the familiar Pythagorean theorem, i.e. $3^2 + 4^2 = 5^2$

The French mathematician Pierre de Fermat (1608 - 1665) wrote in the narrow margin of a book that he had successfully proved that there were no solutions to the equation when n was a whole number greater than 2. Unfortunately, he died without divulging the full proof.

Dr. Wiles's proof is contained in his 200-page manuscript which has been seen by no more than five mathematicians, according to Prof. Yau. The complete proof will probably run into 1,000 pages.

"Dr. Wiles has just announced two weeks ago that some further work is needed to make his proof complete, and I hope this gathering of distinguished academics can help to close the gaps," he said.

Running from December 18 to 21 (Saturday to Tuesday), the Conference on Elliptic Curves and Modular Forms is also discussing other latest developments in the number theory.

An inaugural activity of the Institute of Mathematical Sciences, the conference is sponsored by the Ho Sin-hang Education Endowment Fund and the Chinese University of Hong Kong.

The conference was attended by nearly 200 participants including among others Prof. John Coates and Prof. R. Taylor of Cambridge University; Prof. N. Elkies and Prof. B Gross of Harvard University; Prof. K. Ribet of University of California at Berkeley; Prof. K. Rubin of the University of Ohio State, Columbus; Prof. J. Tate of University of Texas at Austin; Prof. M. Flach of University of Heidelberg; Prof. G. Frey from Germany; Prof. D. Zagier of University of Bonn; Prof. J. Fontaine of the University of Paris; Prof. J.P. Serre of College de France; and Prof, V. Kolyvagin of Steklov Institute, Moscow, all of whom are world-renowned leading experts in number theory.

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Note to Editor:

A photo accompanying the release has been despatched via the GIS press boxes.