Child of Vietnam war wins top maths honour

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Vietnamese-born mathematician Ngo Bao Chau on Thursday won the maths world's version of a Nobel Prize, the Fields Medal, cementing a journey that has taken him from war-torn Hanoi to the pages of Time magazine.

Ngo, 38, was awarded his medal in a ceremony at the International Congress of Mathematicians meeting in the southern Indian city of Hyderabad.

The other three recipients were Israeli mathematician Elon Lindenstrauss, Frenchman Cedric Villani and Swiss-based Russian Stanislav Smirnov.

Ngo, who was born in Hanoi in 1972 in the waning years of the Vietnam war, was cited for his "brilliant proof" of a 30-year-old mathematical conundrum known as the Fundamental Lemma.

The proof offered a key stepping stone to establishing and exploring a revolutionary theory put forward in 1979 by Canadian-American mathematician Robert Langlands that connected two branches of mathematics called number theory and group theory.

Ngo's achievement was brought to wider public recognition by its inclusion in Time magazine's list of the top 10 scientific discoveries of 2009.

"It's as if people were working on the far side of the river waiting for

someone to throw this bridge across," Peter Sarnak, a number theorist at the Institute for Advanced Study (IAS) in Princeton, said of Ngo's breakthrough.

"And now all of sudden everyone's work on the other side of the river has been proven," Sarnak said.

The Fields Medal, founded by the Canadian John Fields and first awarded in 1936, is widely viewed as the highest honour a mathematician can receive.

Presented every four years to two, three, or four mathematicians -- who must be under 40 years of age -- the medal comes with a cash prize of 15,000 Canadian dollars (14,600 US dollars).

The only son of a physicist father and a mother who was a medical doctor, Ngo's mathematical abilities won him a place, aged 15, in a specialist class of the Vietnam National University High School.

In 1988, he won a gold medal at the 29th International Mathematical Olympiad and repeated the same feat the following year.

After high school, he was offered a scholarship by the French government to study in Paris. He obtained a PhD from the Universite Paris-Sud in 1997 and became a professor there in 2005.

Earlier this year he became a naturalised French citizen and accepted a professorship at the University of Chicago.

Among the other Fields medal winners, Lindenstrauss was cited for his work in dynamics and number theory, Smirnov for his "elegant" proof involving the nature of two dimensional models in statistical physics, and Villani for his research into kinetic theory.

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