MATHEMATICIAN NGO BAO CHAU

Mathematician Ngo Bao Chau to teach at Chicago University

VietNamNet Bridge – Mathematician Ngo Bao Chau, who was recently praised as making the most important scientific discovery of 2009 by The Time, has agreed to become a lecturer at Chicago University, USA.

According to the Newswise, the Vietnamese mathematician accepted the appointment on January 25. He will become a professor of maths at the American university as of September 1 2010.

"It is clear that he is among the best mathematicians of our age. I have great expectations from this man," said Robert Fefferman, chief of the Physics Faculty of the Chicago University .

Peter Constantin, chief of the Mathematics Faculty at this university, said: "Bao Chau has obtained a break-through with his achievements. His work spans the two areas of arithmetic and geometry.

"The opportunity to enjoy closer cooperation with my colleagues at the Chicago University played an important role in my decision. Some of the most basic matters in mathematics are being solved at the Chicago University ," Chau said.

Bao Chau, 37, was praised by the Time magazine for his solving of the "fundamental lemma".

According to the Time Magazine, in 1979 the Canadian-American mathematician Robert Langlands developed an ambitious and revolutionary theory that connected two branches of mathematics called number theory and group theory. The theory captured deep symmetries associated with equations involving whole numbers, laying out what is now known as the Langlands program.

Langlands knew that the task of proving assumptions that were the basis of his theory would be the work of generations. But he was convinced that one stepping stone that needed confirmation was what he dubbed, the "fundamental lemma", would be reasonably straightforward.

He, his collaborators and his students were able to prove the special cases of this fundamental theorem. But proving general case proved more difficult than anticipated - so difficult, in fact, that it took 30 years to finally achieve.

Over the past few years, Prof. Ngo Bao Chau, 37, who currently works at Université Paris-Sud and the Institute for Advanced Study (IAS) in Princeton , formulated an ingenious proof for the fundamental lemma. When it was checked this year and confirmed to be correct, mathematicians around the globe breathed a sigh of relief. Mathematicians' work in this area in the last three decades was predicated on the principle that the fundamental lemma was indeed accurate and would one day be proved.

"It's as if people were working on the far side of the river waiting for someone to build a bridge across," says Peter Sarnak, a number theorist at IAS. "And now all of sudden everyone's work on the other side of the river has been proven."

Ngo Bao Chau twice won gold at the international mathematics Olympiad when he was a high-school student. After taking a Ph.D diploma in France , he was invited to teach at the Université Paris-Sud and the Institute for Advanced Study (IAS) in Princeton . Chau was also the first Vietnamese person to win the Clay mathematics award and is among the youngest professors in Vietnam . He was presented this title at the age of 33.