

Mathematics in Vietnam: Past Participle and Present Continuous

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Grothendieck 1967: Une première constatation, et même une constatation assez extraordinaire vu les circonstances, c'est qu'il y a effectivement une vie mathématique digne de ce nom en R.D.V. (The fellow standing right behind Grothendieck happened to be my own uncle.)



At the time when Grothendieck visited Vietnam, Le Van Thiem was the only vietnamese mathematician formally granted with a PhD. degree, under the supervision of Hans Wittich in Goettingen. Back to Vietnam, he helped the building up of the Faculty of Sciences and the Institute of Mathematics



Tạ Quang Bửu signing the Geneva treaty 1954 acting the end France's presence in Vietnam. According to Grothendieck, he was an autodidact mathematician with incredible wide and deep knowledge. We treasure his 1970 notebook in which he solved all exercises in Serre's Local Algebra while being the Minister of higher education and research.



First participation in IMO 1974 in which vietnamese team's performance has been beyond expectation. Since then, the success in IMO has been broadcasted as a source of national pride. This has been an encouragement for young people, including myself, but has been sometimes misleading about the overall ranking of vietnamese mathematics.



In the 70'-80', vietnamese mathematicians, mostly trained in the USSR and eastern european countries, lived and worked in spartan conditions with very limited connection with the West. This times is still remembered as “golden time” where mathematics has been kept “unpolluted”.



By 1990, vietnamese economy nearly collapsed and dragged along its fall the research and higher education system. Thousand of vietnamese scientists converted themselves to businessmen for their own survival.

- The 90' has been a dark period for vietnamese mathematics: people quit doing research, no more PhD students, degraded quality of teaching in Universities
- By the end of the 90', Vietnamese mathematics prepared for its own rebirth by means of strengthening its ties with western countries: France, Germany, USA, Japan ...

- Up to now, hundreds of young vietnamese have obtained PhD degrees in western Universities. Many of them have been partially supported by vietnamese PhD scholarship program.
- Many of them are now successful mathematicians.
- One single issue: most of them stay in the West.



In 2007, Vietnam hosted the IMO. In this occasion, the deputy Prime Minister Nguyễn Thiện Nhân raised concerns about the overall ranking of vietnamese mathematics, and suggested the idea of a national priority program for the development of mathematics.

As the picture witnessed, Peter Scholze vietnamese fame dated much before his invention of perfectoids.



In 2010, the national priority program for the development of mathematics has been approved. As part of this program, the Vietnam Institute for Advanced Study in Mathematics has been founded in 2011.



Ten years earlier, the idea of an Institute for Advanced Study on the Red river was pushed forward by Philip Griffiths. It took more ten years and a Medal to convince people that such an Institute is good for the development of sciences even in a poor country.



Since its establishment, the VIASM has been hosting close to
hundred of research groups involving mathematicians from
Vietnam's University and colleagues from Cambridge, Harvard,
Yale ...



The VIASM also helps organizing training program for teachers and high school student, especially in the gifted program.

What to do next?

- Keep nurturing the gifted classes and the IMO teams.
- Raise the standard of research in mathematics.
- Promote ambitious programs of applied mathematics.
- No ivory towers, but a continuous engagement with the society.