The Oppenheim Lectures is a distinguished lecture series jointly organized by the Department of Mathematics, and the Institute for Mathematical Sciences (IMS) at the National University of Singapore (NUS).

It is held annually beginning from the Academic Year 2014/2015, and is in honour of Sir Alexander Oppenheim, who held the position of Professor and first Head of the Department from 1931, at the time of Raffles College, until 1959.

Professor Oppenheim was also Vice Chancellor of the University of Malaya (the predecessor of NUS) from 1957 to 1963. He was a well-known number theorist, notably for the Oppenheim Conjecture, which was settled by Gregori Margulis in the affirmative in 1986.

### Inaugural Oppenheim Lecture

**By Professor Ngo Bao Chau**

**University of Chicago and Vietnam Institute for Advanced Study in Mathematics**

**On the average rank of elliptic curve over function field**

Following groundbreaking work of Bhargava and Shankar on the average rank of elliptic curves over \(\mathbb{Q}\), we give a proof of similar results valid over function fields. Our proof is based on a geometric setup very similar to the fundamental lemma.

**Date & Time:** Wednesday 28 January 2015, 2.00 p.m.

**Venue:** Department of Mathematics, NUS, Block S17, Seminar Room 1 (#04-06)

### Workshop on Representation Theory & Automorphic Forms

*(in conjunction with the Oppenheim Lectures)*

**Date & Time:** Tuesday 27 January to Thursday 29 January 2015

**Venue:**
- 27 January & 28 January morning @ IMS Auditorium, NUS
- 28 January afternoon & 29 January @ Department of Mathematics, NUS, Block S17, Seminar Room 1 (#04-06)

**Invited speakers**

- Ngo Bao Chau (University of Chicago and Vietnam Institute for Advanced Study in Mathematics)
- Kaoru Hiraga (Kyoto University)
- Wen-Wei Li (Chinese Academy of Sciences)
- Sergey Lysenko (Institut Elie Cartan Nancy)
- Chung Pang Mok (Purdue University and Morningside Center of Mathematics)
- Arvind Nair (Tata Institute of Fundamental Research)
- Dipendra Prasad (Tata Institute of Fundamental Research)
- Martin Weissman (Yale-NUS College)
- Lei Zhang (National University of Singapore)