Mathematics: Research opportunities in India
Presentation at the 2012 IWM Meeting, IMSc, Chennai

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- Selected candidates receive a stipend and contingency grant during their study.

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- The Ph.D. programs at the other research institutes share many of these features.

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- VSRP students visit TIFR for 4 weeks in summer.
- They are guided through an *advanced reading course*.
  There are weekly special lecures called 'VSRP colloquiums' to introduce them to more advanced areas of mathematics.
- They are given TA/DA, accomodation, stipend and access to library and other facilities.

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- Indian Statistical Institutes (**ISIs**). These have strong programs in areas like Analysis, Probability, Statistics etc. They have 3 campuses nationwide (Kolkata, Delhi, Bengaluru) with mathematics programs.
- Indian Institute of Science, Bengaluru (**IISc**). Apart from applied mathematics, they have strengths in complex analysis and geometry/topology.
- Indian Institutes of Technology (**IITs**). These have programs oriented towards Analysis and Applications of mathematics, though this is now changing (e.g. number theory, at IIT Mumbai).
- **IISERs, NISER**. These new institutions also have mathematics Ph.D. programs.

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  The age limits are ≤ 35 years/≤ 50 years, respectively.

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I will discuss some of these programs in more detail now.

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- Teachers (college/university) may visit the programm for 1 to 2 weeks, to observe MTTS method of teaching.

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  - ATMWC - workshop and conference for Researchers.

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- To make mathematics look a fascinating rather than a dry subject, it is crucial that:

  the teachers should have a thorough command over the branches of mathematics, at the undergraduate and post graduate level, along with their subtle points.
- **ATML is meant to give such overall training to teachers.**

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- Eligibility:
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  - Preferably below 30 years
  - Permanent lecturers in a College/University
  - Preference for those who are invoved in Math. Olympiad etc.