AIS – An Introduction to p-adic Methods in Arithmetics (2023)

Organised by

National Centre for Mathematics &
SRM University-*AP*, Andhra Pradesh

3-Week Programme in Advanced Mathematics

The focus of AIS at SRM University-*AP*, Andhra Pradesh, is to study the p-adic numbers and the p-adic methods in arithmetic.

AIS will also have some topics from the basic Algebraic Number Theory (e.g., Class groups, Local Fields, Number Fields, Cyclotomic fields etc.).

Topics covered in the first 10 days

- Absolutes values on fields
- Completeness
- Construction of the field Q_p of p-adic numbers
- p-adic algebraic number theory
- Local-Global Principle

Topics covered in the last 8 days

- The construction of p-adic zeta function
- Modular Forms
- Iwasawa's construction of P-adic L-functions and the main conjecture of Iwasawa Theory
- Applications of p-adic numbers
- Open problems

Date: June 26 to July 15, 2023

Venue: SRM University-*AP*, Andhra Pradesh

Conveners

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