

# Advanced Training in Mathematics (ATM) Schools

Funded by National Board for Higher Mathematics, DAE, Govt. of India

## A brief Overview

There are a large number of doctoral students, postdoctoral fellows, university teachers in the universities, IITs, ISIs and various research institutes in the country. They often learn very limited amount of mathematics during their doctoral programmes. One of the reasons given is lack of a regular training programmes at doctoral level in most mathematics departments across the country.

As a result, foundations of their knowledge remain weak although they may know a lot in the area of their research. This hampers their growth in the future and it also has a negative impact on the programme they carry out when they become faculty members.

To remedy this situation the *National Board for Higher Mathematics* launched ATM Schools the inter-related areas of algebra, analysis, partial differential equations, discrete mathematics, geometry, number theory and topology. This integrated training programme will provide basic and advanced knowledge in these areas and emphasize their interconnections via a series of instructional schools to be held in Winter and Summer every year at various levels in about a dozen carefully selected departments of mathematics across the country.

Now a days important research is being carried out at the boundries of these areas. It is one of the main objectives of this programme to exhibit the unity of mathematics by organizing schools that emphasize the interdependence among them.

There are four types of training programmes under ATM Schools. They are described in the following table:

<b>Abbr.</b>	<b>School</b>	<b>Main target audience</b>
AFS I, II	Annual foundation schools, I and II	I year Ph. D. students
AIS	Advanced instructional schools	II-V year Ph. D. students
ATMWC	Workshop and conference	Researchers
ATML	ATM school for lecturers	College and university lecturers