



Advanced Training in Mathematics Schools

Supported by *National Board for Higher Mathematics*

Advanced Instructional School in Combinatorics and Graph Theory (AIS-CGT)

Venue: *Bhaskaracharya Pratishthana, Pune*

8 May - 4 June, 2009

Conveners: *S. S. Sane, Murali Srinivasan and S. A. Katre*

Brief Description of ATM Schools

Advanced Training in Mathematics (ATM) Schools are a joint effort of more than 50 active researchers across the country with support from the National Board for Higher Mathematics. The programmes are conducted in reputed mathematics departments in Summer and Winter each year. In these Schools, the emphasis will be on problems solving and on highlighting inter-relations of basic subjects in mathematics. The schools are offered mainly for Ph.D. students and lecturers. At the initial stage, ATM Schools consist of two Annual Foundation Schools (AFS I & II) in basic topics such as algebra, analysis, and topology. At a later stage, Advanced Instructional Schools in different topics in Mathematics are organised especially for students who wish to pursue research in related areas.

Advanced Instructional School in Combinatorics and Graph Theory

In this school, The academic content will be divided into three major areas:

1. Enumeration, 2. Graph Theory, 3. Designs including Finite Geometries. Emphasis on examples, calculations as well as proofs. Several lectures should lead to live research topics.

We expect that there will be some follow-up workshops to this material in the next two years.

A special feature of this AIS programme is the inclusion of "Unity of Mathematics Lectures" on applications and interconnections with other parts of mathematics.

Eligibility for Participation

The school will admit 40 students in their first and second years of Ph.D. programme, and a few young university lecturers and

Resource persons

Enumeration	Murali Srinivasan, Krishnan (IITB), Amitava Bhattacharya.
Graph Theory	Arumugam, A. Diwan, R. B. Bapat, Balakrishnan
Designs & Finite Geometries	Bhaskar Bagchi, S. Inamdar, S. S. Sane

Unity of Mathematics Lectures

N. M. Singhi R. S. Kulkarni

college teachers. Students who have attended AFS-I/II before will be given preference to attend this school.

Financial Support

Selected participants will be paid III-AC return train fare from their place of work/home town to the venue by shortest route and provided with accommodation and local hospitality.

How to Apply

The syllabus, applications form and other information about the programme is available on the websites:

<http://www.math.iitb.ac.in/atm> or www.bprim.org

Applications may also be made on plain paper, giving the following information: Name, Date of Birth, Age, Gender, Institute/Department, Areas of interest, Address for correspondence, email address, City, State, Pincode, Academic Record: B.Sc./M.Sc. with names of the Institutes. These should be attested by Head/Principal of the institute.

Completed application forms should reach

Prof. S. A. Katre
Local Coordinator
AIS in Combinatorics & Graph Theory
C/o, Bhaskaracharya Pratishthana,
56/14, Erandavane, Damle Path,
Off Law College Road, Pune - 411004.
e-mail: aisbim@gmail.com

Phone/Fax: 91-20-25434547, Phone: 91-20-25410724

by **Monday, 9th March, 2009**. List of selected candidates will be posted on the website of ATM Schools on **Monday, 16th March, 2009**.

Note: Those who have already applied for AIS-CGT (earlier scheduled in Dec. 2008) need not apply again.

National Coordinating Committee

Director	R. S. Kulkarni	IIT Bombay
Secretary	J. K. Verma	IIT Bombay
Members	S. D. Adhikari	HRI, Allahabad
	Satyadeo	HRI, Allahabad
	S. A. Katre	Pune U., Pune
	Shobha Madan	IIT Kanpur
	I. B. S. Passi	Panjab U., Chandigarh
	R. A. Rao	TIFR, Mumbai