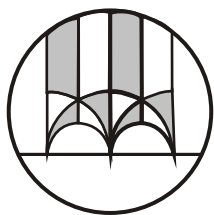# National Centre for Mathematics

www.ncmath.org

(A joint centre of TIFR and IIT Bombay)

Advanced Training in Mathematics Schools

www.atmschools.org

Advanced Instructional School on

Geometric Methods in Complex Analysis

Supported by National Board for Higher Mathematics

2 April–21 April, 2012

Conveners: Gautam Bharali and Kaushal Verma

Brief description of ATM Schools

Advanced Training in Mathematics (ATM) Schools are a joint effort of a large number of 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 problem solving and on highlighting the inter-relations among the basic subjects in mathematics. The schools are offered mainly for Ph.D. students and lecturers. Presently we invite applications for participation in

Advanced Instructional School on Geometric Methods in Complex Analysis

This school will be devoted, to a large extent, to questions in several complex variables. Questions arising from analysis as well as complex geometry will be studied, but the focus will be on geometric methods that have been relevant to these questions. Some topics in complex dynamics where these methods have been useful will also be covered. A large part of the lectures will be devoted to the Bergman metric; the Carathéodory and Kobayashi pseudometrics; and what the properties of these objects reveal about the domains/manifolds on which they are defined. The first week will be devoted to basic notions in several complex variables that will be needed to study the above topics.

Eligibility for participation

The school will admit at most 30 students in their first and second years of the Ph.D. programme, and a few young university lecturers and 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/hometown to the venue by the shortest route, and will be provided with accommodation and local hospitality.

How to Apply

The **online application form** and other information about the programme is available on the website:

http://www.atmschools.org/2012

Application 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, Additional information (if any). These should be attested by the Head/Principal of the institute.

Completed application forms should reach

> **Prof. Gautam Bharali**
> **Department of Mathematics**
> **Indian Institute of Science**
> **Bangalore – 560012**
> **Karnataka**
> **e-mail: AIS_iisc2012@math.iisc.ernet.in**

by March 5, 2012. The list of selected candidates will be posted on the website of the ATM Schools on March 7, 2012.

Resource Persons

Sameer Chavan	IIT Kanpur
R.S. Kulkarni	IIT Bombay
Sanjay Pant	Univ. of Delhi
A.R. Shastri	IIT Bombay
R.R. Simha	TIFR (retd.)