



# National Centre for Mathematics

## Advanced Training in Mathematics Schools

Supported by National Board for Higher Mathematics

### AIS Workshop on Number Theory: Circle Method

25th June -14 July, 2012

Conveners: **R. Balasubramanian & D. S. Ramana**

#### Advanced Instructional Schools (AIS)

##### Objectives of AIS

After students gain basic knowledge in algebra, analysis and topology in the annual foundation schools, they are ready for studying several subjects in mathematics at research level. In any AIS, lectures are delivered by experts in two closely related areas. The emphasis in these schools will be, in addition to imparting basic knowledge, in understanding connections between various areas of mathematics and problem solving. Towards the end of these schools special expository lectures will be arranged which introduce the audience to major open problems.

#### AIS Workshop on Number Theory : Circle Method

##### Brief description of the school

In this school, we mainly plan to cover the circle method applied in various contexts like Waring's Problem, Vinogradov's Three Primes Theorem, Modular Forms, Additive Combinatorics Problems.

##### Eligibility for participation

Students who perform well in the Annual Foundation Schools will have the option of further training in Advanced Instructional Schools. In addition, Ph. D. students having fellowship, post doctoral fellows and a few university faculty members will be selected for these based on recommendation letters and performance in M. Sc. and/or Ph. D. courses.

##### 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 website:

<http://www.atmschools.org/2012>

OR

<http://www.ncmath.org>

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 Head/Principal of the institute.

#### Completed application forms should reach

Prof. R. Balasubramanian and Dr. D. S. Ramana  
Coordinators, AIS Workshop  
Institute of Mathematical Sciences  
IVth Cross Street, CIT Campus  
Taramani  
Chennai - 600113  
e-mail: *director at imsc.res.in*  
Phone:+91- 44 22543201 (O)  
Fax: 91-44-22541586

by **Thursday, March 15, 2012**. List of selected candidates will be posted on the websites of ATM Schools by **Saturday, 24th March., 2012**.

#### Resource persons

R. Balasubramanian	IMSc, Chennai
S. Gun	IMSc, Chennai
G. Prakash	HRI, Allahabad
D. S. Ramana	HRI, Allahabad