



# National Centre for Mathematics

[www.ncmath.org](http://www.ncmath.org)

(A joint centre of TIFR and IIT Bombay)

## Advanced Training in Mathematics Schools

[www.atmschools.org](http://www.atmschools.org)

(Supported by National Board for Higher Mathematics)



### Mathematical Panorama Lectures on “ $p$ -adic Reductive Groups”

Venue: TIFR, Mumbai

May 05 - 10, 2014

Conveners: U.K. Anandavardhanan & Dipendra Prasad

#### Mathematical Panorama Lectures

A series of lectures called “Mathematical Panorama Lectures” were planned as part of the mathematical activities in 2012, which was declared as the National Mathematics Year by the Government of India. These are lecture courses given by eminent mathematicians on diverse topics of current research and will be accessible to research scholars and lead upto recent developments. These lectures are offered mainly for Ph.D. students and lecturers.

**Presently we invite applications for participation in the Panorama Lectures by Prof. M.S. Raghunathan, IIT Bombay**

Professor M.S. Raghunathan will give a course of six 90-minutes lectures on reductive groups over  $p$ -adic fields. The main purpose of the lectures is to give an account the Bruhat-Tits theory and Tits' classification of  $p$ -adic groups and their parahoric subgroups.

These lectures will assume on the part of the audience familiarity with the theory of algebraic groups over algebraically closed fields, the Chevalley  $Z$  forms of simple Lie algebras as well as basic material on  $p$ -adic Lie groups. The lectures will be delivered in the forenoon (10.30 - 11.15 – tea break – 11.45 – 12.30). During the afternoons, there will be informal discussion sessions meant to be supplementary to the main theme of the lectures.

Outstation researchers and students wishing to attend the lectures need to register at the website. National Centre for Mathematics can offer local hospitality (boarding and lodging) to a limited number of outstation participants. The registration form also covers request for local hospitality.

#### Eligibility for participation

Applications are invited from research scholars, post-doctoral fellows and young faculty members.

#### Financial Support

A limited number of outstation participants will be provided with accommodation and local hospitality. Participants are required to arrange their own travel.

#### How to apply

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

<http://www.atmschools.org/2014>

Last date for receiving completed application is:

**1<sup>st</sup> March, 2014**

List of selected candidates will be posted on the above mentioned website on:

**10<sup>th</sup> March, 2014**

#### About the Speaker



Professor M. S. Raghunathan is currently the Head of the National Centre for Mathematics and NASI Platinum Jubilee Chair at the Indian Institute of Technology Bombay. Before moving to IIT Bombay, Professor Raghunathan was at the Tata Institute of Fundamental Research for more than five decades, where he also held a Homi Bhabha Chair. Professor Raghunathan's past leadership roles in Mathematics include being the Chair of the Executive Organizing Committee of ICM 2010 in Hyderabad, Vice-Chairman of the Organising Committee of the National Mathematics Year 2012, President of the Ramanujan Mathematical Society and Chairman of the National Board for Higher Mathematics for close to two decades. He was a member of the Executive Committee of the International Mathematical Union and the Abel Prize Committee, each for two terms.

Professor Raghunathan is well-known for his work on discrete subgroups of Lie groups, the congruence subgroup problem and the Dani-Raghunathan conjecture in ergodic theory. His book titled "Discrete subgroups of Lie groups", published in 1972, is considered as a classic in the area.

Professor Raghunathan is bestowed with many honours including the Fellowship of the Royal Society (2000) and the Padma Bhushan (2012).