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MATHEMATICAL PANORAMA LECTURES

“A National Mathematics Year Event”

Kervaire Invariant Problem and its solution

Venue: Indian Statistical Institute, Kolkata

May 14 - 25, 2012



Professor Michael Hopkins, Department of Mathematics, Harvard University, USA, will give a series of Panorama lectures on

Kervaire Invariant Problem and its solution

The Panorama lectures will be based on the following topics : The Kervaire invariant problem and its long history; homotopy groups of spheres, techniques of computations; equivariant homotopy theory, its recent advances leading to the solution of Kervaire invariant problem. There will also be a workshop, toward preparation for these lectures, held at Indian Statistical Institute, Kolkata, during May 14-19, 2012.

About the Principal Speaker

Michael J Hopkins is a professor of mathematics at Harvard University since 2005 after 15 years at MIT. He was a plenary speaker at the Zurich ICM in 1994. He received the Veblen Prize for Geometry in 2001. His work concentrates on stable homotopy theory. It concerns Ravenel conjectures, Hopkins-Miller Theorem and topological modular forms, Kervaire invariant problem, K-theory, loop groups and topological field theories.



Brief description of the topics to be covered in the workshop

Basic homotopy theory; spectra, use of spectral sequences in the computation of homotopy groups of spheres, formal groups laws and complex cobordism, some methods and techniques to understand Kervaire invariant problem and its recent solution.

Resource Persons for Workshop

A.R. Shastri	IIT Bombay
Neeta Pandey	BKC Colege, Kolkata
Rekha Santhanam	IIT Kanpur
P. Sankaran	IMSC, Chennai
H. Mukherjee	NEHU, Shillong
R. Banerjee	TIFR, Mumbai
G. Mukherjee	ISI Kolkata

Eligibility for Participation

We extend the invitation to all researchers and scientists working on homotopy theory and related fields. Ph. D. students and young researchers are especially encouraged to attend.

How to Apply

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

Online applications need to be submitted on www.atmschools.org site. The same application form needs to be attested by the supervisor/Head of the department and mailed to the address:

Prof. Goutam Mukherjee
Stat-Math Division, ISI Kolkatta,
203, B.T. Road, Kolkata 700108

Financial Support

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