

CIMPA-INDIA research school

Jadavpur University, West Bengal, Kolkata, December 1-12, 2016

Geometric flows are burning topic now a day which involve the evolution of Riemannian metric along with some geometric concepts.

In this research school we shall discuss about evolution of Riemannian metric with respect to time. Ricci flow, mean curvature flow and some type of other Geometric flow will be studied thoroughly. The main objective of this course will be to study the singularity formation in the case of Mean Curvature Flow and Ricci Flow. The concept of Ricci soliton was introduced by R. Hamilton in mid 80's and they are self-similar solutions to Hamilton's Ricci flows. The Ricci solitons and gradient Ricci solitons will also be studied. The discussions about Ricci Solitons as Contact Riemannian Metrics will be done.

We want to motivate researcher of our country and our neighbouring countries in this field, so that they can apply it in the various field of Physics and Mathematics. The aim of the Research School is to provide students with the basic as well as more advanced notions of both theories and applications.

Administrative and scientific coordinators

- ▶ Arindam Bhattacharyya (Jadavpur University, Kolkata, India), bhattachar1968@yahoo.co.in
- ▶ Thomas Richard (Université Paris-Est Créteil, France), thomas.richard@u-pec.fr

Scientific Committee:

- Manjusha Majumdar (Tarafdar), University of Calcutta, India.
- Reto Muller, Queen Mary University of London, U.K.
- Ramesh Sharma, University Of New Haven, West Haven, CT 06516, U.S.A.
- Sayan Kar, IIT, Kharagpur, India.
- Thomas Richard, Université Paris-Est Créteil, France.

Local Organizing Committee:

- Arindam Bhattacharyya, Jadavpur University, India.
- Alaka Das, Jadavpur University, India.
- Gopal Chandra Shit, Jadavpur University, India.
- Farook Rahaman, Jadavpur University, India.

Scientific Program:

All the courses and talks of the Research School will be in English.

I). Manjusha Majumdar (Tarafdar), India (Three Lectures of 50 min.)

Title: Basics of Riemannian manifold.

II). Alaka Das, India (Three lectures of 50 min.)

Title: Basics of PDE

III). Sylvain Maillot, France (Five Lectures of 50 min.)

Title: Ricci flow and applications.

IV). Thomas Richard, France (Five Lectures of 50 min.)

Title: Ricci flow on surfaces.

V). Reto Muller, U.K. (Five Lectures of 50 min.)

Title: The singularity formation in Mean Curvature Flow and Ricci Flow.

VI). Chenxu HE, U.S.A. (Five Lectures of 50 min.)

Title: Geometry of Gradient Ricci Solitons

VII). Sayan Kar, India (Five Lectures of 50 min.)

Title: Geometric flows with higher order and higher derivative terms.

VIII). Ramesh Sharma, U.S.A. (Five Lectures of 50 min.)

Title: Ricci Solitons As Contact Riemannian Metrics.

Deadline for registration: August 28, 2016

Application procedure for applicants from outside India; see CIMPA website.

Applicants from India must contact local organizer: Arindam Bhattacharyya,
cimpa.ju2016@gmail.com or bhattachar1968@yahoo.co.in

View online: <http://cimpaschool.wix.com/ju2016>