Ricci curvature and Ricci flow

April 14th - June 30th, 2008

A trimester at IHP - Centre Émile Borel
Courses, workshops and seminars are planned

Organizers
Gérard Besson (CNRS Grenoble) — John Lott (Ann Arbor) — Gang Tian (Princeton)

The topics of the trimester will include
Ricci flow and the geometrization of three-manifolds
Kähler-Einstein metrics, constant scalar curvature metrics and Kähler-Ricci flow
Ricci flow on manifolds of dimension four and higher
Analytic aspects of Ricci flow and related flows
Einstein metrics and recent advances in relativity
Ricci limit spaces and synthetic Ricci curvature

Scheduled long courses
Introduction to Ricci curvature by S. Gallot
Introduction to the Ricci flow: the work of Hamilton in dimensions 3 and 4 by Z. Djadli
Introduction to Kähler-Einstein geometry and Kähler-Ricci flow by N. Païd
Topology and geometry of 3-manifolds by S. Maillot
Perelman’s work and the geometrization conjecture by L. Bessières, G. Besson, J. Lott & S. Maillot
Optimal transport of measures and Ricci curvature by D. Cordero-Erausquin

Several advanced courses will be announced later

Workshops
Ricci curvature and complex geometry — June 2nd - 6th, 2008
Ricci flow and related topics — June 23rd - 27th, 2008

Those interested in participating in the program are invited to visit the Website www.ihp.jussieu.fr
Registration is free but recommended.
Participation of postdocs and PhD students is strongly encouraged.
6 Marie-Curie fellowships (3 months each) will be attributed. The application form can be downloaded from www.ihp.jussieu.fr
For further information, contact the CEB organization assistant Claude Lacet: ricci@ihp.jussieu.fr
To receive updates of the scientific program of the session, send an email to informricci-request@ihp.jussieu.fr containing the single word subscribe (in the message body).