

September – December 2009

rigidity
2009

Trimester Program on **Rigidity**

Organizers: Wolfgang Lück and Nicolas Monod

Rigidity phenomena play an important role in different areas of mathematics. Examples are Mostow-Margulis-Zimmer rigidity, topological rigidity, von Neumann rigidity and rigidity under quasi-isometry. The following areas and their interactions will be in the focus of the activity: K - and L -theory, surgery theory, L^2 -methods, finite von Neumann algebras and measure theory, geometric group theory, cohomological algebra, bounded cohomology asymptotic methods on semi-simple groups, multiplicative ergodic theory and functional-analytic aspects of group representations.

We want to bring together both leading experts and young talented junior scientists. We aim for a fruitful exchange of ideas and techniques between the different fields leading to new collaborations and results in the long run.

We are planning also one-week-workshops about rigidity and related topics, probably in October and November.

Senior participants:

M. Burger (ETH Zürich)
A. Eskin (Chicago)
B. Farb (Chicago)
D. Gaboriau (Lyon)
N. Higson (Penn State)
G. Hjorth (Melbourne and UCLA)
P. Linnell (Blacksburg)

W. Lück (Münster)
N. Monod (EPF Lausanne)
N. Ozawa (Tokyo)
J. Roe (Penn State)
T. Schick (Göttingen)
K. Vogtmann (Cornell)
S. Weinberger (Chicago)

Call for participation: The Hausdorff Research Institute offers visiting positions for the whole period of the trimester program (for senior scientists, Postdocs and PhD-students). The deadline for applications is December 15, 2008. Please send applications (including CV and, for Postdocs and PhD-students, a letter of recommendation) using our online application form (preferably www.him.uni-bonn.de/rigidity) or by e-mail to the director of HIM, Prof. Dr. Matthias Kreck (kreck@him.uni-bonn.de). In addition numerous fellowships for shorter periods are available.