



INTERNATIONAL
CENTRE *for*
THEORETICAL
SCIENCES

TATA INSTITUTE OF FUNDAMENTAL RESEARCH

Mathematics of the Planet Earth 2013

<http://www.mpe2013.org/>

Call for proposals for scientific programs



The year 2013 has been marked for various mathematical activities around the world, under a wide umbrella of initiatives called *Mathematics of the Planet Earth (MPE) 2013*, which will focus on mathematical research in areas of relevance to the various processes that affect the planet earth. The dynamics of the oceans and the atmosphere and the changes in the climate are of course very important for the planet. In addition to these obvious topics, a multitude of topics are of relevance to this theme, including the financial and economic systems, the energy production and utilization, spread of epidemics at the population level, ecology and genomics of species, just to name a few.

Mathematics plays a crucial role in two ways in this research since it is used as a universal language and tool for any quantitative research in all the sciences, including biology, economics, etc. Thus it is an essential component of any multi- or inter-disciplinary research. Furthermore, fundamental mathematical questions arise out of these research topics. The activities during the MPE 2013 will highlight both these aspects.

ICTS programs during MPE 2013

The International Centre for Theoretical Sciences (ICTS) of the Tata Institute of Fundamental Research (TIFR) is a partner institution in the MPE initiative. ICTS is a multi- and inter-disciplinary effort with a strong human resource development component. The main goals of ICTS are to foster research, be a resource for high level education and training, and reach out to the larger society by being a node for scientific information and values. ICTS provides a platform and infrastructure to organize various activities in theoretical and mathematical sciences, at the forefront of knowledge. More detailed information about the past, current, and proposed activities is available at <http://www.icts.res.in/>.

We invite the Indian scientific community, possibly in collaboration with researchers around the world, to propose workshops, thematic programs, and conferences on topics that are aligned with the MPE initiative. The duration of these programs could be from a few days to a few weeks, but it would be highly desirable to have a training component for young researchers (students, postdocs, faculty). Please do get in touch with us at mpe2013@icts.res.in if you have specific questions or would like to collaborate on an existing activity.

We request that short pre-proposals, outlining the main theme of the proposed program and a tentative plan including format, duration, location, etc. be sent to ICTS at mpe2013@icts.res.in. The deadline for submission of the pre-proposals is 30 November 2011.