5th Prague Summer School 2006 Mathematical Statistical Mechanics

A Summer School for PhD students and post-docs will take place in Prague

September 10-23, 2006

This school is organized in the tradition of previous schools in 1996, 1998, 1999, and 2003. It is organized by Center for Theoretical Study and Institute of Theoretical Computer Science at Charles University, under the auspices of the ESF-programme Phase Transitions and Fluctuation Phenomena for Random Dynamics in Spatially Extended Systems (RDSES).

The Summer School will consist of eight mini-courses of 5–6 one-hour lectures, covering a variety of fields of current interest in mathematical statistical physics. Students are expected to stay for the entire duration of the school. The courses will be kept on a level that should allow the students to follow them without any special preliminary knowledge.

Main speakers:

• Marek Biskup (UCLA): Reflection positivity, Gaussian domination, and phase transitions in classical and quantum systems

- Anton Bovier (Berlin) and Frank den Hollander (Leyden) Metastability under stochastic dynamics
- Dima Ioffe (Technion) Giant components of quantum random graphs
- Christian Maes (Leuven) and Karel Netočný (Prague) Fluctuations in nonequilibrium systems
- Fabio Martinelli (Roma) Kinetically constrained spin models
- **Stephan Mertens** (Magdeburg) Computational complexity and phase transitions in combinatorial optimization
- Fabio Toninelli (Lyon) Localization-delocalization phenomena in random polymer models

There is no conference fee. Local expenses for a two-week stay are about 540 Euros and RDSES is prepared to grant a number of fellowships covering the local expenses. Those wishing to participate, write please to Barbora Svatá (barbora@cts.cuni.cz) and state if you will need your local expenses to be covered.

Roman Kotecký Chairman of Organizing Committee