Noise in Non-Equilibrium Systems: From Physics to Biology

Dresden, April 11 -14, 2011

This workshop brought together leading international scientists specialized in different areas of non-equilibrium statistical mechanics. The 38 talks and 31 posters presented at this workshop provided a topical panorama ranging from foundational questions of thermodynamics of small systems (Van den Broeck, Seifert), quantum mechanics and its impact on various transport properties (Kohler, Casado-Pascual, Wellens, Schleich, Grifoni, Großmann, Platero, Richter, May, Thorwart), active transport (Schimansky-Geier, Ebeling, Jülicher), the influence of spatial confinement on Brownian motion and stochastic transport (Franosch, Rubi, Bezrukov), different types of ratchets (Mateos, Dittrich, Grifoni), problems of driven Brownian motion in nonlinear potentials (Łuczka, Morillo-Buzón), modeling and characterization of anomalous transport (Goychuk, Sokolov), heat transport (Li, Benenti, Nitzan, Saito), dynamics of networks (Wellens, Yaliraki), to dynamical aspects of biological problems (Netz, Jung, Frauenfelder, Yaliraki, Jülicher).
Further details can be found in the program brochure of the workshop, sent by separate mail, or on the conference web-page
http://www.mpipks-dresden.mpg.de/ nines11/
The atmosphere of the workshop was relaxed. Lively discussions took place after the talks and continued during the coffee, lunch and dinner breaks.