

Andrejewski-Day



at the Faculty for Mathematics and Physics University of Freiburg

Friday, May 18, 2012

The mathematics of quantum transport

This one-day workshop is dedicated to foster the scientific dialogue between mathematics and physics, under the active participation of research students and young postdocs from both disciplines.

Solutions to many challenging physical problems can be eased enormously through systematic mathematical insight, and physics has the potential to open new perspectives for mathematical research. One of the currently blossoming areas where such cross-fertilization is equally desirable as timely is the field of quantum transport phenomena, which defines this workshop's scientific focus. Four invited talks by internationally renowned scientists on their research at the interface between mathematics and physics will approach this theme from various perspectives, reaching from differential operators and their spectral statistics over semi-classical methods to field theory and open quantum systems. The invited lectures will be complemented by selected short talks and poster contributions by young researchers (on application). Ample time will be given for informal discussions between and after the lecture sessions.

Invited Speakers: Fabio Benatti (Università di Trieste) Jean-Mi

Thierry Paul (École Polytechnique Paris)

Jean-Michel Bismut (Université Paris-Sud) Maciej Zworski (UC Berkeley)

Scientific Coordinators: Andreas Buchleitner (Institute of Physics), Katrin Wendland (Institute of Mathematics)

> Organization: Gislinde Bühler, Evelyn Rusdea

Location: Albert-Ludwigs-Universität Freiburg, Institute of Physics, Hermann-Herder-Str. 3

Further details: http://home.mathematik.uni-freiburg.de/mathphys/konf/Andrejewski.html

Online-application to: buchleitner_office@physik.uni-freiburg.de Deadline for registration is March 31, 2012

Walter und Eva Andrejewski-Stiftung