



University
of Glasgow



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First Announcement

Progress in Non-equilibrium Green's Functions IV

Interdisciplinary Workshop

17 - 21 August 2009, University of Glasgow,

Glasgow, Scotland, UK

Aim:

The dynamics of quantum many-particle systems is of growing importance in many fields, including condensed matter, plasmas, quantum transport, high energies, quantum chemistry, etc. At the same time self-consistent equilibrium results for correlated electron systems are becoming of increasing relevance. This workshop is devoted to the most general approach to these problems – theory and modern applications of *non-equilibrium Green's functions*. It will unite specialists and students from various fields of physics for an informal exchange. It continues the tradition of the first three meetings held in 1999 in Rostock, 2002 in Dresden and 2004 in Kiel, Germany and which resulted in excellent review books, see http://www.theo-physik.uni-kiel.de:81/~bonitz/E/bks_mb.html. The Workshop will be hosted by the University of Glasgow in Scotland.

Topics:

- Electronic correlations in condensed matter systems.
- Collective effects. Quasiparticles. Bound states. Bose condensation and superfluidity.
- Charged particles and photons. QED. Many-body effects in plasmas.
- High energy. Particles. QCD. Cosmology.
- Strong fields. Quantum transport.
- Combination of NGF methods with other approaches.

Programme Committee:

A. Abrikosov (Argonne), Carl-Olof Almbladh (Lund), J. R. Barker (Glasgow), G. Baym (Illinois), M. Bonitz (Kiel), P. Danielewicz (Michigan), D. Ferry (ASU), F. Jahnke (Bremen), A.P. Jauho (Lyngby), J. Knoll (GSI Darmstadt), L.V. Keldysh (Moscow), P.C. Martin (Harvard), R. van Leeuwen (Groningen), B. Velicky (Prague).

Local Organisation and Programme committee:

John Barker, Scott Roy, Michael Bonitz

Abstract Deadline:

Deadline for 1-page abstracts: **April 1st 2009.**

For updated information see the web page:

<http://www.elec.gla.ac.uk/pngf4/>

