

## Second Announcement and call for papers

### *The Interdisciplinary Workshop* “Progress in Nonequilibrium Green’s Functions IV”

to be held 17<sup>th</sup>-21<sup>st</sup> August, 2009 in 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 nonequilibrium 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 Rostock (1999), Dresden (2002) and Kiel (2005), Germany and which resulted in excellent review books.

#### **Topics:**

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

#### **Invited Speakers:**

Speakers include:

Alex Abrikosov\* (Argonne), Carl Olof Almladh\* (Lund), Frithjof Anders (Dortmund), Karsten Balzer (Kiel), John Barker (Glasgow), Gordon Baym (Illinois, Urbana-Champaign), Michael Bonitz (Kiel), Pawel Danielewicz (Michigan), Wolf-Dietrich Kraeft (Rostock), Barry Dunlet, (University of Michigan), David Ferry (Arizona State), Dirk Gericke (Warwick), Matthew Gilbert (Illinois Urbana-Champaign), Antti-Pekka Jauho (DTU Kopenhagen), Frank Jahnke (Bremen), Kimmo Kainulainen (Jyväskylä), Leonid Keldysh\* (Moscow), Irena Knesevic (Wisconsin), Joern Knoll (GSI Darmstadt), Dietrich Kremp (Rostock), Gerald Mahan (Penn State), Paul Martin\* (Harvard), John McGrady\* (Glasgow), Antonio Martinez (Glasgow), Nikolay Prokofjev ( U Massachusetts), Arnau Rios (Michigan State University), Peter Schmitteckert (Karlsruhe), Robert van Leeuwen (Jyväskylä), Bedrich Velicky (Prague).

\*to be confirmed

The scientific program will consist of tutorial lectures (accessible to graduate students), invited review talks and posters. Attendance will be limited to 80. Colleagues interested in participation, please contact any member of the programme committee.

### **Programme Committee:**

A. Abrikosov (Argonne), Carl-Olof Almladh (Lund), J. R. Barker (Glasgow), G. Baym (Illinois), M. Bonitz (Kiel, chair), 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 (Jyväskylä), B. Velicky (Prague).

### **Local Organising Committee:**

John Barker, Scott Roy, Michael Bonitz

### **Social Events:**

There will be various receptions and it is hoped to arrange a whisky tasting/appreciation event. Sightseeing tours will be available on demand.

### **Important Dates:**

- Deadline for 1-page abstract: 22<sup>nd</sup> April 2009
- Acceptance notice: 1<sup>st</sup> June 2009
- Early Registration: 26<sup>th</sup> June 2009
- Manuscript submission deadline: August 17<sup>th</sup> 2009 (refereed during workshop)
- Final version deadline: October 1<sup>st</sup> 2009

### **Registration:**

- Registration fee: £340 (early registration); £400 (late registration)
- Reduced fee for students: £250 (early registration); £290 (late registration)
- Reduced fee for accompanying persons: £70 (does not include proceedings, but includes excursions)
- Financial Support:
  - support for Eastern European participants is expected.
  - for other participants limited support will be available.
- For details and updates, **registration and hotel forms**, see the conference web page: <http://www.elec.gla.ac.uk/pngf4/>
- Contacts:
  - Prof. John Barker ([jbarker@elec.gla.ac.uk](mailto:jbarker@elec.gla.ac.uk))
  - Dr Scott Roy ([S.Roy@elec.gla.ac.uk](mailto:S.Roy@elec.gla.ac.uk)),
  - Prof. Mike Bonitz ([bonitz@physik.uni-kiel.de](mailto:bonitz@physik.uni-kiel.de))

Registration fee covers: conference attendance, one conference proceedings (Journal) per participant, breakfast, coffee/tea, etc. during conference, receptions.