



Program for the Symposium on
NanoScale Thermal Transport

October 7, 2016 in Kollektorn at MC2, Chalmers

09:00 – 09:35 Prof. Gerald Mahan, Penn State University, USA.

Heat transfer between two metals

09:35 – 09:55 Prof. Per Delsing/Prof. Göran Johansson, Chalmers, Sweden

Heating of two-level fluctuators in quantum devices

09:55 – 10:15 Prof. Johan Liu, Chalmers, Sweden

Low dimensional materials for thermal control applications

10:15 – 10:35 Prof. Eliodoro Chiavazzo, Politecnico di Torino, Italy

Thermal transport beyond nanoscale: micro-roughness and convection

10:35 – 10:55 Coffee

10:55 – 11:30 Prof. Jeffrey Neaton, Berkeley, USA

Excited-state and charge transport phenomena in organic solids and at hybrid interfaces with ab initio many-body perturbation theory

11:30 – 11:50 Prof. Heiner Linke, Lund University, Sweden

Hot-carrier solar cells: a perfect marriage of thermoelectrics and photovoltaics

11:50 – 12:10 Prof. Christian Müller, Chalmers, Sweden

Thermal and electrical transport in plastics, from insulating to conducting polymers

12:10 – 12:30 Prof. Anna Delin, KTH, Sweden

Spin dynamics and spin heat interactions

12:30 – 13:30 Lunch

- 13:30 – 13:50** Prof. Muhammet S. Toprak, KTH, Sweden
Tuning down thermal conductivity in bulk thermoelectrics
- 13:50 – 14:10** Prof. Georg Madsen, Technical University Vienna, Austria
Green's function approach to thermal transport
- 14:10 – 14:30** Dr. Ankita Katre, CEA-Grenoble, France
Thermal transport in defective materials: an ab-initio investigation
- 14:30 – 14:50** Prof. Paul Erhart, Chalmers, Sweden
The interplay of order and transport and why it matters for thermoelectric performance.
- 14:50 – 15:10** Dr. Kristian Berland, University of Oslo, Norway
How to bring down the thermal conductivity of MNiSn Half-Heuslers - a theoretical analysis
- 15:10 – 15:30** Prof. Hans Hjelmgren, Chalmers, Sweden
Thermal waves for depth profiling of thermal properties in epitaxial semiconductor structures

15:30 – 15:50 Coffee

- 15:50 – 16:25** Prof. Nicola Marzari, EPFL, Switzerland
Thermal transport as a kinetic theory of relaxons, and other 2d adventures
- 16:25 – 17:00** Prof. Bernd Gotsmann, IBM Zürich, Switzerland
Heat transfer experiments on molecular scales
- 17:00 – 17:20** Prof. Ole Martin Løvvik, University of Oslo, Norway
Thermal transport from temperature dependent effective potentials
- 17:20 – 17:40** Prof. Andreas Isacsson, Chalmers, Sweden
Thermal transport in nanoribbons
- 17:40 – 18:00** Prof. Tomas Löfwander, Chalmers, Sweden
Thermoelectric effect in Dirac materials

18:00 - ... **Mingling at the Physics department (the staff room at the 4th floor, Physics building)**

