

# Program

## Sunday, 10 April 2016

17:00 – 21:00 Registration

18:30 *DINNER / Informal get together*

## Monday, 11 April 2016

08:00 BREAKFAST

08:45 Scientific organizers **Welcome and Opening**

09:00 – 10:00 Carsten Henkel **Basics of non-equilibrium  
electrodynamics on the nano-scale**

10:00 – 11:00 Stefan Scheel **Introduction to macroscopic QED and  
its applications**

11:00 – 11:30 *COFFEE BREAK*

11:30 – 12:50 **Poster flash presentations**

12:50 **Conference Photo** (in the foyer of the lecture hall)

13:00 *LUNCH*

# Program

**Monday, 11 April 2016**

14:30 – 15:30	Svend-Age Biehs	<b>Laws of thermal radiation for hyperbolic materials</b>
15:30 – 16:30	Yannick de Wilde	<b>Near-field probing of the thermal radiation</b>
16:30 – 17:00	COFFEE BREAK	
17:00 – 17:20	Susumu Komiyama	<b>Imaging non-equilibrium phenomena with electromagnetic evanescent waves</b>
17:20 – 17:40	Zhenghua An	<b>Nanothermometrical study of electron transport by passive scanning near-field infrared imaging</b>
17:40 – 18:00	Raul Esquivel-Sirvent	<b>Magnetic tuning of near field radiative heat transfer in quantum wells</b>
18:30	<i>DINNER</i>	
19:30 – 21:00	<b>Poster session I</b>	

# Program

**Tuesday, 12 April 2016**

08:00	<i>BREAKFAST</i>	
09:00 – 10:00	Alejandro Rodriguez	<b>Molding the flow of heat: Limits and modifications to heat transfer at the nanoscale</b>
10:00 – 11:00	Sheng Shen	<b>Nanostructured materials for thermal radiation control in near- and far-fields</b>
11:00 – 11:30	<i>COFFEE BREAK</i>	
11:30 – 12:30	Brahim Guizal	<b>Heat transfer and Casimir-Lifshitz interactions between diffraction gratings: numerical methods</b>
12:30 – 12:50	Moladad Nikbakht	<b>Radiative heat transfer in fractal structures</b>
13:00	<i>LUNCH</i>	
14:30 – 15:30	Pramod Sangi Reddy	<b>Radiative heat transfer in nanoscale gaps</b>
15:30 – 16:30	Michal Lipson	<b>Enhancing near field thermal radiation using MEMS</b>
16:30 – 17:00	<i>COFFEE BREAK</i>	
17:00 – 17:20	Tomáš Králík	<b>Low temperature experiment on near field heat transfer between dielectrics, metals and superconductors</b>
17:20 – 17:40	Ilari Maasilta	<b>Near-field heat transfer at low temperatures: Recent advances</b>
17:40 – 18:00	Bong Jae Lee	<b>Probing near-field thermal radiation between two parallel plates using MEMS-based platform</b>
18:30	<i>DINNER</i>	
19:30 – 21:00	<b>Poster session II</b>	

# Program

**Wednesday, 13 April 2016**

- 09:00 – 10:00 Philippe Ben-Abdallah **Thermotronics: Toward the development of circuits to manage radiative heat flux**
- 10:00 – 11:00 Karl Joulain **Thermal transistor in the dynamical regime and the quantum regime**
- 11:00 – 11:30 *COFFEE BREAK*
- 11:30 – 12:30 Mika Prunnila **Heat transport engineering in membranes and junctions for detectors and refrigerators**
- 12:30 – 12:50 Levan Chotorlishvili **Electromagnetically controlled multiferroic thermal diode**
- 12:50 – 13:05 Stefan Jorda **About the Wilhelm and Else Heraeus-Foundation**
- 13:10 *LUNCH*
- 14:30 – 18:00 **Excursion**
- 18:30 *HERAEUS DINNER*  
*(cold & warm buffet, free beverages)*

# Program

**Thursday, 14 April 2016**

08:00	<i>BREAKFAST</i>	
09:00 – 10:00	Sebastian Volz	<b>Polariton heat conduction in ultra-small gaps and junctions</b>
10:00 – 11:00	Achim Kittel	<b>Giant heat transfer at the nanometer scale</b>
11:00 – 11:30	<i>COFFEE BREAK</i>	
11:30 – 12:30	Shanhui Fan	<b>Near-field thermal energy transfer in the presence of a non-zero chemical potential for photons</b>
12:30 – 12:50	Karthik Sasihithlu	<b>Phonon induced heat transfer across a vacuum gap</b>
13:00	<i>LUNCH</i>	
14:30 – 15:30	Clivia Sotomayor Torres	<b>Phonons in free-standing silicon membranes and in phononic crystals</b>
15:30 – 16:30	Pierre-Olivier Chapuis	<b>Heat conduction in 2D phononic structures</b>
16:30 – 17:00	<i>COFFEE BREAK</i>	
17:00 – 17:20	Jose Ordonez-Miranda	<b>Thermal energy transport in a surface phonon-polariton crystal</b>
17:20 – 17:40	Konstantinos Termentzidis	<b>Effect of amorphisation on the thermal properties of nanostructures</b>
17:40 – 18:00	Fabian Menges	<b>Thermometry and thermal transport measurements by scanning thermal microscopy</b>
18:30	<i>DINNER</i>	
19:30 – 21:00	<b>Poster session III</b>	

# Program

**Friday, 15 April 2016**

08:00	<i>BREAKFAST</i>	
09:00 – 10:00	Miguel Rubi	<b>Near-field thermal radiation energy conversion</b>
10:00 – 11:00	Aleksandr Volokitin	<b>Giant enhancement of quantum friction above threshold velocity</b>
11:00 – 11:30	<i>COFFEE BREAK</i>	
11:30 – 11:50	Igor Nefedov	<b>Lateral drag forces, caused by electromagnetic fluctuations in a slab of anisotropic absorbing material</b>
11:50 – 12:00	Scientific organizers	<b>Closing remarks and poster awards</b>
12:15	<i>LUNCH</i>	

***End of the seminar and FAREWELL COFFEE / Departure***

*Please note that there will be **no** dinner at the Physikzentrum on Friday evening for participants leaving the next morning.*