

Program

Sunday, May 6, 2018

17:00 – 21:00 Registration

19:00 *BUFFET SUPPER and get-together*

Monday, May 7, 2018

08:00 BREAKFAST

08:45 – 09:00 Scientific organizers **Opening remarks and presentation of the seminar**

09:00 – 10:00 Ricardo Decca **Measurement of the Casimir interaction from 0.2 to 8 microns:**

10:00 – 11:00 Ho Bun Chan **Measurement of the Casimir force between two rectangular gratings**

11:00 – 11:30 COFFEE BREAK

11:30 – 12:00 Philip Kristensen **Repulsive Casimir-Polder forces with a non-local material response**

12:00 – 12:30 Daniel Bloch **When atom and surface fluctuations couple : Casimir-Polder interaction for atoms resonantly coupled to thermally populated surface polaritons**

12:30 – 12:40 **Conference photo** (in the front of the lecture hall)

12:40 *LUNCH (followed by coffee and/or tea)*

Program

Monday, May 7, 2018

14:00 – 14:30	Philipp Schneeweiß	Ground state cooling of atoms 300 nm away from a hot surface
14:30 – 15:00	András Vukics	The theory & experimental realization of photon-blockade breakthrough as a first-order dissipative quantum phase transition
15:00 – 16:00	Karin Jacobs	Adhesion, adsorption, wetting and friction are influenced by van der Waals forces: old theory - new experiments
16:00 – 16:30	COFFEE BREAK	
16:30 – 17:30	Lilia Woods	Casimir physics surprises in the graphene family
17:30 – 18:30	Rudolf Podgornik	Hydrodynamic fluctuation stresses mediated across a randomly driven fluid film
18:30 – 19:00	Yehuda B. Band	Dynamics of a magnetic needle in a magnetic field: Landau-Lifshitz-Gilbert dissipation and fluctuations
19:00 – 19:15	Stefan Jorda	About the Wilhelm and Else Heraeus Foundation
19:30	DINNER	

Program

Tuesday, May 8, 2018

07:30	BREAKFAST	
08:30 – 09:30	Ferdinand Schmidt-Kaler	Quantum states of trapped ions sensing fluctuation-induced phenomena
09:30 – 10 :30	Thomas Schweigler	High order correlations and what we can learn about the solution for many body problems from experiment
10:30 – 11:00	Tim Herpich	Minimal model for thermodynamics of nonequilibrium phase transitions
11:00 – 11:30	COFFEE BREAK	
11:30 – 12:00	Raul Esquivel-Sirvent	Thermal band-gaps and Fano resonances in the Near Field Radiative Heat Transfer
12:00 – 12:30	Carsten Henkel	Non-equilibrium Rytov electrodynamics with electrons and phonons
12:30	LUNCH (followed by coffee and/or tea)	

Program

Tuesday, May 8, 2018

14:00 – 15:00	Aleksandr Volokitin	Fluctuation-electromagnetic phenomena under dynamic and thermal nonequilibrium conditions
15:00 – 16:00	Javier García de Abajo	Ultrafast processes triggered by plasmon fluctuations
16:00 – 16:30	COFFEE BREAK	
16:30 – 17:00	Poster flashes	
17:00 – 19:30	Poster session	
19:00	DINNER	

Program

Wednesday, May 9, 2018

08:00	BREAKFAST	
09:00 – 10 :00	Peter Hänggi	The ring of Brownian motion: The good, the bad and some simply silly
10 :00 – 11:00	Clemens Bechinger	Swarming, orientation and quorum sensing of synthetic microswimmers
11:00 – 11:30	COFFEE BREAK	
11:30– 12:00	Boris Müller	Oscillating modes of driven colloids in overdamped systems
12:00 – 12:30	Alessio Squarcini	Critical Casimir interaction between generalized colloidal Janus particles in two spatial dimensions
12:30	LUNCH (followed by coffee and/or tea)	

Program

Wednesday, May 9, 2018

14:00 – 14:30	Francisco Diego Mazzitelli	Dynamical Casimir effect: superconducting resonators and moving mirrors
14:30 – 15:00	Itay Griniasty	Classical analogue of the Unruh effect
15:00 – 16:00	Bei-Lok Hu	Nonequilibrium atom-field-medium interaction: A unified theoretical framework for fluctuation forces, quantum friction, and quantum optomechanics
16:00 – 16:30	COFFEE BREAK	
16:30 – 17:30	Ron Folman	Fluctuations on the atom chip
17:30 – 18:30	Giovanna Morigi	Collective dynamics of atomic ensembles due to long-range optomechanical forces
18:30 – 19:00	Philipp Haslinger	Atom interferometry probes inertial properties of blackbody radiation
19:00	HERAEUS DINNER (social event with cold & warm buffet with complimentary drinks)	

Program

Thursday, May 10, 2018

08:00	BREAKFAST	
09:00 – 10 :00	Shanhui Fan	Near-field energy and momentum transfer between bodies with non-reciprocal materials or out of local equilibrium
10 :00 – 11:00	Arno Rauschenbeutel	Chiral quantum optics
11:00 – 11:30	COFFEE BREAK	
11:30– 12:00	Ryan O. Behunin	Fundamental noise dynamics in Brillouin lasers
12:00 – 12:30	Roberto Passante	Detection of the Unruh effect through radiation-mediated interactions between accelerating atoms
12:30	<i>LUNCH (followed by coffee and/or tea)</i>	

End of the seminar and departure

NO DINNER for participants leaving on Friday morning