

**International Max Planck Research School
“Dynamical Processes in Atoms, Molecules and Solids”**

Seminar, 1. - 3. April 2009

Seminar: Nationalparkzentrum Sächsische Schweiz
Dresdner Str. 2b, 01814 Bad Schandau
www.lanu.de/de/Nationalparkzentrum.html

Accommodation: Apparthotel Am Schlossberg
Elbstr. 6, 01814 Bad Schandau
www.apparthotel-am-schlossberg.de

P R O G R A M

Wednesday, April 1st

- 10:30 Departure from Dresden Hauptbahnhof
S-train 1, platform 18
- 11:16 Arrival at Bad Schandau
- 12:30 LUNCH at “Restaurant der Jahreszeiten” im Nationalparkzentrum
- 13:20 WELCOME: Ulf Saalmann
CHAIRPERSON: Sigmund Heller
- 13:30 - 14:00 **Christian Gnodtke**
Coherent diffractive imaging: Past, present and future
- 14:00 - 14:30 **Alexander Croy**
Coherent manipulation of charge and spin qubits in semiconductor quantum dots
- 14:30 - 15:00 **Orkidia Zeneli**
Magnetic and electrical properties of $\text{La}_{0.82}\text{Sr}_{0.18}\text{CoO}_3$ films
- 15:00 - 15:30 **Liran Wang**
Thermal expansion and magnetostriction measurement of $\text{ReO}_{1-x}\text{F}_x\text{FeAs}$ systems
- 15:30 - 16:00 COFFEE BREAK
CHAIRPERSON: Aroon O’Brien
- 16:00 - 16:30 **Werner Koch**
Trajectories, heat baths, and quantum mechanics
- 16:30 - 17:00 **Christoph-Marian Goletz**
Quantum systems coupled to a finite bath within a semiclassical hybrid approach
- 17:00 - 17:30 **Jan Roden**
Light absorption and energy transfer on quantum aggregates
- 18:00 DINNER

Thursday, April 2nd

CHAIRPERSON: Beate Bergk

- 09:00 - 09:30 **Lena Simon**
An ultracold Bose gas in optical dipole trap
- 09:30 - 10:00 **Julius Helm**
Dephasing of two qubits
- 10:00 - 10:30 **Le Anh Duc**
*The local / non-local duality of 5f electrons in actinide compounds:
A mean-field study*
- 10:30 - 11:00 COFFEE BREAK

CHAIRPERSON: Alexander Croy

- 11:00 - 11:30 **Waltraut Wustmann**
Aspects of dissipation in time-periodic systems
- 11:30 - 12:00 **Martin Schlesinger**
Dissipation in dimers attached to helium nanodroplets
- 12:00 - 12:30 **Vardan Apinyan**
*Pairing scenarios for the Hubbard model in the strong coupling limit.
A spin-rotationally invariant approach*
- 12:45 LUNCH
- 14:00 TREKKING TOUR with hobbit hikes,
www.hobbit-hikes.de
- 18:00 DINNER at Nationalparkzentrum

CHAIRPERSON: Christian Gnodtke

- 19:30 - 20:00 **Robert Vacha**
Interactions between lipid membranes and ions in aqueous solutions
- 20:00 - 20:30 **Jan Heyda**
*Different denaturation pathways of small protein
triggered by urea and guanidinium*

Friday, April 3rd

CHAIRPERSON: Werner Koch

09:00 - 09:30 **Alexey Mikaberidze**
Laser-irradiated heteronuclear clusters: Local ignition followed by ultrafast plasma resonance

09:30 - 10:00 **Andrey Lyubonko**
Collective modes in ultracold plasma

10:00 - 10:30 **Ansgar Pernice**
The role of entanglement in open quantum systems

10.30 - 11:00 COFFEE BREAK

CHAIRPERSON: Christoph-Marian Goletz

11:00 - 11:30 **Hugo Vieyra**
Angular dependence of the upper critical field H_{c2} for $CeCu_2Si_2$

11:30 - 12:00 **Alexey Alfonsov**
Spin-state polaron in lightly hole-doped $LaCoO_3$

12:30 LUNCH

Departure

S-trains from Bad Schandau depart 13:41, 14:11, 14:41 etc.