

International Max Planck Research School for Dynamical Processes in Atoms, Molecules, and Solids



MAX PLANCK INSTITUTE
FOR CHEMICAL PHYSICS OF SOLIDS



mpipks



Meeting of the Scientific Evaluation Committee Dresden – MPIPKS – July 4, 2008

- 9:00 – 9:30 **Welcome and Introduction** [seminar room 1 + 2]
9:00 Prof. JM Rost (chairman)
9:15 Dr. U Saalman (coordinator)
- 9:30 – 12:00 **Talks by IMPRS students** [seminar room 1 + 2]
9:30 Dmytro Inosov (IFW)
High-energy anomalies in the ARPES spectra
of cuprates: Recent results
9:55 Jan Roden (PKS)
Absorption and energy transfer of molecular aggregates
- 10:20 – 10:45 *Coffee break*
10:45 Marek Paściak (Wrocław)
Local structure of ferroic materials:
Diffuse scattering experiments and atomistic simulations
11:10 Yiu Wai Lai (IFW)
Actuation dynamics of magnetic shape memory materials
11:35 Werner Koch (TUD)
Non-Markovian dissipative semiclassical dynamics
- 12:00 – 13:00 *Lunch break*
- 13:00 – 15:00 **Poster session** [2nd floor, see list on the backside]
- 15:00 – 16:00 **Meeting with IMPRS students** [seminar room 1D1]
- 16:00 – 16:45 **Meeting with faculty members** [seminar room 1D1]
- 16:45 – 17:30 **Internal session of the evaluation committee**

Posters [numbered poster walls are in the 2nd floor]

- (1) **Mr. Ajit Kumar Patra** Intrinsic anisotropies of epitaxial PrCo₅ films
- (2) **Mr. Alexander Croy** Time-resolved electron transport through quantum dot systems
- (3) **Mr. Alexander Mai** New renormalization approach to the periodic Anderson model
- (4) **Mr. Alexei Mikaberidze** Ionization of Xe@He core-shell clusters in strong laser pulses
- (5) **Mr. Alexey Alfonsov** Origin of a spin-state polaron in lightly hole-doped LaCoO₃
- (6) **Ms. Andreia Ioana Popa** Electrochemically doped oxides
- (7) **Mr. Andrey Lyubonko** Dynamics of ultracold plasmas
- (8) **Ms. Annu Thomas** Biomimetic growth and morphology control of calcium oxalates
- (9) **Mr. Ansgar Pernice** Counting statistics of quantum transport
- (10) **Ms. Anupama Parameswaran** Magnetic properties of molecular nanostructures
- (11) **Ms. Aroon O'Brien** Frustrated lattice structures with charge degrees of freedom
- (12) **Ms. Beate Bergk** de Haas-van Alphen investigations on rare-earth transition-metal compounds
- (13) **Mr. Christian Gnodtke** Imaging of atomic clusters with femtosecond X-FEL pulses
- (14) **Mr. Christoph-Marian Goletz** Semiclassical dynamics in open quantum systems
- (15) **Ms. Constanta Cristina Bran** Domain structure and magnetization processes of complex magnetic multilayers
- (16) **Mr. Dmytro Inosov** Waterfalls in Cuprates
- (17) **Ms. Fei Tang** Inelastic neutron scattering on R₂PdSi₃ compounds
- (18) **Mr. Grzegorz Urbanik** Scanning tunneling microscopy and spectroscopy on selected 2D materials
- (19) **Mr. Hugo Vieyra** Resistivity and thermal conductivity measurements on heavy-fermion superconductors . . .
- (20) **Mr. Igor Popov** Structural, electronic, and transport properties of molybdenum chalcogenide structures
- (21) **Mr. Ionuț Georgescu** Rare-gas clusters in intense VUV laser fields
- (22) **Mr. Ivan Liu** Ultracold Rydberg atom in structured and disordered environments
- (23) **Mr. Jan Handt** Dynamics of molecules and clusters in intensive laser fields
- (24) **Mr. Jan Heyda** Ion-specific interactions between halides and basic amino acids in water
- (25) **Mr. Jan-Peter Ismer** Spin dynamics in unconventional superconductors
- (26) **Mr. Jan Roden** Absorption and energy transfer of aggregates
- (27) **Mr. Julius Helm** Dynamics of open quantum systems: Decoherence and loss of entanglement
- (28) **Ms. Katrin Koch** Electric field gradient and chemical bonding in intermetallic gallides
- (29) **Mr. Lars Bittrich** Temporal flooding of regular islands
- (30) **Mr. Le Duc Anh** Electrons in actinides systems
- (31) **Ms. Lena Simon** Role of entanglement in open system dynamics
- (32) **Ms. Liran Wang** Coupling of structure and magnetism in multiferroic RFe₃(BO₃)₄
- (33) **Mr. Martin Schlesinger** Dissipation and decoherence in molecular systems
- (34) **Mrs. Orkidia Zeneli** Dynamic strain in epitaxial ferroic oxide films
- (35) **Mr. Phan Van-Nham** Valence transition in rare earth systems under high pressure
- (36) **Mr. Ricardo Alberto Pinto** Localized classical and quantum excitations in small networks . . .
- (37) **Mr. Robert Vacha** "Acidity" of the interface between water and hydrophobic media
- (38) **Mr. Sigmund Heller** Stochastic field equations for cold Bose gases
- (39) **Mr. Silvio Baier** Nonsequential double ionization of H₂ in intense laser pulses
- (40) **Mr. Steffen Löck** Dynamical tunneling in systems with a mixed phase space
- (41) **Mr. Vardan Apinyan** Emergence of energy scales and effective interactions in systems . . .
- (42) **Mr. Volodymyr Zabolotnyy** Investigation of renormalization effects in high temperature cuprate superconductors
- (43) **Ms. Waltraut Wustmann** Occupation probabilities of Floquet states in driven systems with a mixed phase space
- (44) **Mr. Wenxu Zhang** Magnetism, structure and their interactions
- (45) **Mr. Werner Koch** Semiclassical treatment of non-Markovian dissipative quantum dynamics
- (46) **Mr. Wojciech Müller** Searching for new f-electron compounds with superconductivity or non-Fermi liquid behaviour
- (47) **Mr. Yiu Wai Lai** Actuation dynamics of magnetic shape memory materials