

Wednesday, September 26th 2018 (Schloss Etelsen, Langwedel-Etelsen)

- 13:00 - 14:00 Registration at the registration desk
- 14:00 - 14:15 Opening and welcome, Thomas Frauenheim and Tim Wehling
- 14:15 - 15:00 *P1: Electron-Plasmon interactions in nanostructures*
Alexandra Goebel, Teresa Reinhard, (Max Planck Institute for the Structure and Dynamics of Matter, Hamburg), Lara Roman Castellanos, Martik Aghajanian (Imperial College London)
- 15:00 - 15:45 *P2: Many-body instabilities in 2D materials*
Jan Berges (University of Bremen)
- 15:45 - 16:15 Coffee Break
- 16:15 - 17:00 *P3: Many-body approaches to realistic quantum impurity models and Coulomb engineering*
Christina Steinke, Bin Shao (University of Bremen)
- 17:00 - 17:45 *PP: Coupling first principle and many-body method*
Tim Wehling (University of Bremen)
- 17:45 - 18:15 Round Table I - Many-body effects in 2d materials: What's next?
- 18:30 - 20:00 Dinner
- 20:00 - 22:00 Discussions

Thursday, September 27th 2018 (Schloss Etelsen, Langwedel-Etelsen)

- Breakfast
- 08:30 - 09:00 Registration at the registration desk
- 09:00 - 09:45 *Experiment - Predicting how crystalline matter dissolves: Kinetic Monte Carlo techniques and experimental validation.*
Andreas Lüttge (University of Bremen)
- 09:45 - 10:30 *P10: Electromigration in materials with extended defects*
Elham Khorasani (University of Bremen)
- 10:30 - 11:00 Coffee Break
- 11:00 - 11:45 *P11: Electronic structure and charge transport in defective and doped TMDCs*
Muhammad Sufyan Ramzan, Yun An, Vladimir Bacic (Jacobs University Bremen)
- 11:45 - 12:30 *P12: 2D materials based sensing in liquid solvents*
Sebastian Potthoff, Massimo Delle Piane (University of Bremen)
- 12:30 - 13:30 Lunch
- 13:30 - 14:15 *Experiment - Challenges for theoretical spectroscopy, structure prediction and dynamics from solid state chemistry*
Thorsten Gesing (University of Bremen)
- 14:15 - 15:00 *P8: First-principles surface photo-chemistry*
Thomas Teusch, Thorben Petersen (University of Oldenburg)
- 15:00 - 15:45 *P7: Energy and charge transfer at surfaces*
Sayan Maity, Hasan Rahman (Jacobs University Bremen)
- 15:45 - 16:15 Coffee Break
- 16:15 - 17:00 *P9: Excited state molecular dynamics using TD-DFT/B in the frequency and time domain*
Verena Gupta, Adriel Dominguez, Lynn Gross (University of Bremen)
- 17:00 - 17:45 *P6: Influence of defects & environment on photocatalytic properties of TiO2*
Filippo Balzaretti (University of Bremen)
- 17:45 - 18:15 Round Table II - Electronic and ionic transport in RTG QM³
- 18:30 - 20:00 Dinner
- 20:00 - 21:00 Poster Session and Discussions

Friday, September 28th 2018 (Schloss Etelsen, Langwedel-Etelsen)

- Breakfast
- 09:00 - 09:45 *Experiment - Charge and excitation dynamics probed by ultrafast spectroscopy*
Christoph Lienau (University of Oldenburg)
- 09:45 - 10:30 *P4: Many-body optics of TMDCs and black phosphorous*
Frederik Lohof (University of Bremen)
- 10:30 - 11:00 Coffee Break
- 11:00 - 11:45 *Experiment - Hybrid nanostructures - probing materials and surfaces*
Martin Eickhoff (University of Bremen)
- 11:45 - 12:30 *P5: Excited carrier dynamics in atomically thin 2D semiconductors*
Daniel Erben, Christian Carmesin, Mawussey Segnon, Michael Lorke, Alexander Steinhoff (University of Bremen)
- 12:30 - 13:30 Lunch
- 13:30 - 14:00 Round Table III - Structural and electronic dynamics in RTG QM³
- 14:00 - 15:30 Planning of next steps for RTG QM³
- 15:30 - 16:00 Coffee and Departure

