

Contributions to Hirscheegg meeting^(21.09.2016)

Overview lectures (45 min)

Prisner, Thomas	Advances with AWG and Optimum Control Pulses
Schiemann, Olav	New Spin Labels
Steinhoff, Heinz-Jürgen	In cell EPR
Suter, Dieter	Microresonators

Guests lectures (35 min)

Blank, Aharon	A new approach for distance measurements between two spin labels in the >10 nm range
Choi, Taeyoung	Magnetic dipole-dipole sensing at atomic scale using electron spin resonance STM
Doorslaer, Sabine van	Light-induced EPR of fullerene-free blends for organic solar cells
McCracken, John	The Aromatic Amino Acid Hydroxylases: Exploring the Details of a Catalytic Cycle with EPR Spectroscopy
Stoll, Stefan	Effects of coherent rectangular and sech/tanh pump pulses in DEER experiments with up to three pump pulses.
Walsworth, Ronald	Nanoscale Magnetic Sensing Using NV-Diamond

Progress reports (25 min)

Anders, Jens PI		CMOS voltage-controlled oscillators for PoC and rapid scan ESR experiments.
Assafa, Tufa Enver	AG Bordignon	Orthogonally spin labelling Bcl-2 proteins for in-organelle and in-cell EPR.
Bejenke, Isabel	AG Bennati	Electron-nuclear cross polarization in 1H and 2H ENDOR: further developments and first applications
Deichmüller, Jacqueline	AG Havenith	Sensing of Light induced Magnetization by Magnetic Resonance Force Microscopy
Eng, Julien	AG Neese	Magnetic relaxation in single ion magnets.
Friedlaender, Stefan	AG Pöpl	Continuous wave single crystal electron paramagnetic resonance of cupric ions in the zn(ii) doped porous
Gerstmann, Uwe PI		Radio frequency STM-spectroscopy for single-molecule spin resonance
Hagelueken, Gregor, PI		Actin induced activation of the T3SS effector YopO studied by EPR spectroscopy.
Harneit, Wolfgang, PI		From EDMR to recombination spectroscopy.
Hrubesch, Florian	AG Brandt	Efficient electrical spin readout of NV- centers in diamond.
Kraffert, Felix	AG Behrends	Transient EDMR: Recent Progress and Challenges Ahead.
Mathies, Guinevere		Efficient cross-effect DNP with trityl-nitroxide radicals
Möser, Jannik	AG Lips	Combined High- and Low-Frequency Electrically Detected Magnetic Resonance.
Neugebauer, Petr, PI		High Frequency ESR Spectroscopy in Field and Frequency Domains.
Pribitzer, Stephan	AG Jeschke	The Revival of TRIER.

Reinhard, Friedemann, PI		Single molecule EPR - why?
Schnegg, Alexander, PI		FD-FT THz-EPR for Magneto-Structural Correlations in Integer and Half-Integer High Spin Transition Metal Ions.
Schöps, Philipp	AG Prisner	Pushing SIFTER towards new application.
Shiddiq, Muhandis	AG Suter	Microresonators for High-Frequency Optically-Detected Magnetic Resonance.
Sperlich, Andreas, PI		Observation of Spin States involved in Organic Electroluminescence Based on Thermally Activated Delayed Fluorescence.
Weichselbaumer, Stefan	AG Hübl	pEPR Experiments at Millikelvin Temperatures using Adiabatic Pulses.
Zeier, Robert	AG Glaser	From modeling to optimization in multi-spin systems.

Poster presentation

Auth, Michael	AG Sperlich	Ambipolar Charge Transfer In Single-Wall Carbon Nanotube Based Bulk-Heterojunctions.
Berndhäuser, Andreas	AG Schiemann	In-cell measurement of the Trityl-Iron distance in CYP101 via RIDME.
Bloos, Dominik	AG Slagern	Application of High Frequency Microwave Spectroscopy on Electron Transport of Solid State Materials.
Bondarenko, Elena	AG Steinhoff	Modular bio-orthogonal site-directed spin labeling for EPR spectroscopy in vivo and in vitro.
Bunzmann, Nikolai	AG Sperlich	Investigation of spin states in organic light emitting diodes based on thermally activated delayed fluorescence via multi-frequency ELDMR and EDMR techniques.
Gerstmann, Uwe, PI		NV centers in SiC polytypes: identification, modeling and basic properties.
Godt, Adelheid, PI		Gd(III) and Mn(II) complexes and molecular rulers for testing and development of EPR techniques.
Jeschke, Gunnar, PI		Optimization of shaped pulses for EPR- Dos and Don'ts.
Kallies, Wolfgang	AG Glaser	Optimum Control Pulses – Convergence and Applications.
Kern, Michal	AG Slagern	Integration of molecular quantum bits with semiconductor spintronics.
Kultaeva, Anastasiia	AG Pöpl	EPR Study of the Isostructural Elastic Layer-Structured Metal-Organic Framework (ELM-11).
Masaaki Saito	AG Neese	Linear-scaling electronic structure methods which can be applicable to large, real-life molecules in the domain-based local pair-natural orbital (DLPNO) framework.
Ronneburg, Hendrik	AG Risse	Current efforts to set up an EDMR experiment working under ultra-high vacuum (UHV) conditions to investigate defects on semiconductor surfaces.
Schnegg, Alexander, PI		FD-FT THz-EPR with Improved Versatility and Spectral Range.