Program

Monday, 1 November 2021

16:00 – 20:00	Registration	
from 18:00	BUFFET *SUPPER / Informal get together*	
20:00	Javier Aizpurua	**Addressing photonics at the atomic scale**

Tuesday, 2 November 2021

07:45 – 08:45	*BREAKFAST*	
08:45 – 09:00	Scientific organizers	**Welcome and Organization**
09:00 – 09:45	Susanne Baumann	**Stochastic resonance as a tool to investigate spin dynamics**
09:45 – 10:30	Thomas Fredriksen	**Spin physics in graphene nanostructures**
10:30 – 11:00	*COFFEE BREAK*	
11:00 – 11:45	Nadine Hauptmann	**What can atomic force microscopy contribute to understand atomic-scale magnetism?**
11:45 – 12:30	Shawulienu Kezilebieke	**Topological superconductivity in van der Waals heterostructures**
12:30	*LUNCH*	

Program

Tuesday, 2 November 2021

14:00 – 15:30	**Poster Session A**	
15:30 – 16:00	*COFFEE BREAK*	
16:00 – 16:45	Tyler Cocker	**Atomically resolved terahertz scanning tunnelling spectroscopy as a tool for exploring new materials**
16:45 – 17:15	Manish Garg	**Real-space sub-femtosecond imaging of quantum electronic coherences in molecules**
17:15 – 18:00	Melanie Müller	**Tracing ultrafast hot electron dynamics inside a THz-gated STM tip**
18:00	*DINNER*	
20:00 – 21:00	Ingmar Swart	**Electronic quantum materials simulated with artificial lattices**

Program

Wednesday, 3 November 2021

08:00	*BREAKFAST*	
09:00 – 09:45	Guillaume Schull	**From single-molecule fluorescence to photosynthesis with an STM**
09:45 – 10:30	Yang Zhang *(online)*	**Real-space evidence for wavelike electronic energy transfer in donor–acceptor molecular systems through quantum coherence**
10:30 – 11:00	*COFFEE BREAK*	
11:00 – 11:45	Blanca Biel *(online)*	**SPM DFT-based simulations of defected 2D materials**
11:45 – 12:30	Remy Pawlak	**On-surface synthesis of silicene and nanographene characterized by atomic force microscopy**
12:30 – 12:40	**Conference Photo** (in front of the Physikzentrum/Main entrance)	
12:40	*LUNCH*	
14:00 – 18:00	**Excursion**	
18:00	*HERAEUS DINNER at the Physikzentrum* *(cold & warm buffet, with complimentary drinks)*	

Program

Thursday, 4 November 2021

08:00	*BREAKFAST*	
09:00 – 09:45	Anika Schlenhoff *(online)*	**Using SP-STM at nanometer distances for imaging and manipulation of atomic-scale magnetism**
09:45 – 10:30	Dimas de Oteyza	**Chemical stability of zigzag edges in carbon nanostructures**
10:30 – 11:00	*COFFEE BREAK*	
11:00 – 11:45	Martin Švec	**From single-molecule emitters to entangled excitonic states: the insights from the scanning-probe spectromicroscopy**
11:45 – 12:30	Elizabeth Boer-Duchemin	**Brighter but not smaller: advances in light emission using scanning probe techniques in air**
12:30	*LUNCH*	
14:00 – 15:30	**Poster Session B**	
15:30	*COFFEE BREAK*	
16:00 – 16:45	Katrin Domke	**Probing geometric and electronic properties of single-molecule junctions with a combined operando nearfield Raman & break-junction platform**
16:45 – 17:15	Philip Willke	**Coherent Control of Individual Atomic and Molecular Spins on Surfaces**
17:15 – 18:00	Fernando Delgado	**A general description of driven dissipative systems beyond the Bloch equations**
18:00	*DINNER*	
20:00 – 21:00	Fabian Natterer	**Dynamic Duo: Sparse Sampling and Parallel Spectroscopy for Fast Quasiparticle Interference Imaging**

Program

Friday, 5 November 2021

08:00	*BREAKFAST*	
09:00 – 09:45	Philip Moriarty *(online)*	**Sifting Self-Organisation: Automated Classification of Far-From-Equilibrium Nanostructures**
09:45 – 10:30	Annica Black-Schaffer *(online)*	**Majorana fermions in magnetic impurity chains on conventional superconductors**
10:30 – 11:00	*COFFEE BREAK*	
11:00 – 11:45	Deung-Jang Choi	**Creating new bands in a superconductor by crafting different types of spin chains**
11:45 – 12:30	Laerte Patera	**Imaging the effect of electron transfer at the atomic scale**
12:30 – 12:45	Scientific organizers	**Closing remarks and poster prize**
12:45	*LUNCH*	

End of Seminar / Departure