

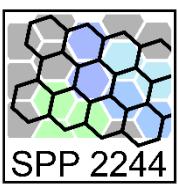
Kickoff Meeting 2nd Funding Period

Star G Hotel Premium Dresden Altmarkt, May 27 – 28, 2024

Event Locations:

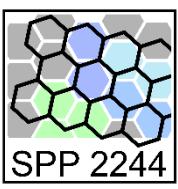
- Meeting venue: Star G Hotel Premium Dresden Altmarkt (Altmarkt 4, 01067 Dresden)
- Hotel rooms at Star G Hotel are provided and paid for by the central project
- Hotel rooms are available from May 26 to May 28, unless communicated otherwise with the organization committee during the registration process.

Times		Monday, May 27	Tuesday, May 28
09:00	00	Opening	Session 4
	15		
10:00	30	Session 1	
	45		
11:00	00	Coffee Break	Coffee Break
	15		
12:00	30	Session 2	Session 4
	45		Election of Steering Committee + Closing
13:00	00	Lunch	Lunch
	15		
14:00	30	Poster Session	
	45		
15:00	00	Coffee Break	
	15		
16:00	30	Session 3	
	45		
17:00	00		
	15		
18:00	30		
	45	Dinner	
19:00	00		
	15		
	30		
	45		



Monday, May 27

8:30 – 9:00	Registration	
9:00 – 9:30	Opening (Jaroslav Fabian, Florian Arnold) Scientific perspective of the 2 nd funding period + information from the central project	
9:30 – 10:30	Session 1 (Chair: Alireza Ghasemifard)	
	9:30	Ermin Malic, Andrey Turchanin, Bernhard Urbaszek Dipolar excitons and interlayer coupling: Optics, dynamics and transport in Janus TMD heterostructures
	9:50	Sebastian Bange High-lying excitons and tuneable excitonic quantum optics in stacked van-der-Waals semiconductors
	10:05	Stefan Mathias, Marcel Reutzel, Bent van Wingerden Dark excitons: Energetics, dynamics, transport and correlated phases
10:30 – 11:00	Coffee break	
11:00 – 12:30	Session 2 (Chair: Aris Koulas-Simos)	
	11:00	Ralph Ernstorfer, Tommaso Pincelli Exploring Electronic Correlations, Excitonics and Topology on Ultrafast Timescales in van der Waals Heterostructures
	11:20	Gabriel Bester Atomistic theory of excited states in van-der-Waals heterostructures: Moiré confinement, strain and electric field effects
	11:35	Marko Burghard, Alexander Holleitner, Christoph Kastl Electronic control of combined spin-orbit and magnetic exchange coupling in graphene vdW- heterostructures (CombSOC)
	11:55	Stuart Parkin Interplay between magnetism and superconductivity in 2D van der Waals heterostructures
	12:10	Jurgen Smet Magnetotransport studies of interfacial interactions in van der Waals structures
12:30 – 13:30	Lunch	
13:30 – 15:30	Poster session	
15:30 – 16:00	Coffee break	
16:00 – 17:30	Session 3 (Chair: Ammon Fischer)	
	16:00	Janina Maultzsch Optical and vibrational properties of twisted 2D layered heterostructures
	16:15	Jaroslav Fabian Proximity spin interactions in 2D magnetic vdW (hetero)multilayers
	16:30	Xinliang Feng, Thomas Heine, Thomas Weitz Magnetic and electronic properties of graphene/MOFene superlattices
	16:50	Jeison Fischer, Amilcar Bedoya Pinto Non-collinear spin textures in magnetic moiré van der Waals heterostructures
	17:10	Hans Tornatzky, Hua Lv Tailoring (opto)spintronic phenomena by van-der- Waals heterostructure design
18:30	Conference Dinner Pulverturm Dresden (An d. Frauenkirche 12, 01067 Dresden)	



Tuesday, May 28

9:00 – 10:30	Session 4 (Chair: Chirag Patelkar)	
9:00	Fei Ding, Jonathan Finley, Rolf Haug	Tunable Moiré Potentials in 2D-Heterostructures using Anisotropic Strain
9:20	Kirill Bolotin	Fingerprinting, tailoring, and transporting excitons in strained 2D heterostructures
9:35	Emeline Nysten	
9:50	Christoph Stampfer	Straintronics with van der Waals Ferroelectrics Confining electrons in twisted and proximity- coupled bilayer graphene
10:10	Wolfgang Belzig, Angelo Di Bernardo, Elke Scheer, Hadar Steinberg	Towards 2D superconducting spintronics
10:30 – 11:00	Coffee break	
11:00 – 12:00	Session 5 (Chair: Maksim Degoev)	
11:00	Alexey Chernikov, Alexander Högele, Alexander Steinhoff-List	Quantum gases in moiré-ordered and reconstructed heterostructures: effective dimensionalities, hybrid states, and interactions
11:20	Dante Kennes, Tim Wehling, Ursula Wurstbauer	Correlations in van der Waals [Hetero]Structures by the Spectroscopic Fingerprints of Quasiparticles and Collective Excitations
11:40	Christopher Gies, Stephan Reitzenstein, Christian Schneider	Manybody non-linear and coherent phenomena in optical cavities with embedded van der Waals heterostructures: The bosonic versus the fermionic regime
12:00 – 12:30	Election of Steering Committee + Closing	
12:30 – 13:30	Lunch	



List of posters

Numbers are assigned in the same order as talks

Poster	Principal Investigators	Project name
1	Ermin Malic, Andrey Turchanin, Bernhard Urbaszek	Dipolar excitons and interlayer coupling: Optics, dynamics and transport in Janus TMD heterostructures
2	Sebastian Bange	High-lying excitons and tuneable excitonic quantum optics in stacked van-der-Waals semiconductors
3	Stefan Mathias, Marcel Reutzel, Bent van Wingerden (deputy)	Dark excitons: Energetics, dynamics, transport and correlated phases
4	Ralph Ernstorfer, Tommaso Pincelli	Exploring Electronic Correlations, Excitonics and Topology on Ultrafast Timescales in van der Waals Heterostructures
5	Gabriel Bester	Atomistic theory of excited states in van-der-Waals heterostructures: Moiré confinement, strain and electric field effects
6	Marko Burghard, Alexander Holleitner, Christoph Kastl	Electronic control of combined spin-orbit and magnetic exchange coupling in graphene vdW-heterostructures (CombSOC)
7	Stuart Parkin	Interplay between magnetism and superconductivity in 2D van der Waals heterostructures
8	Jurgen Smet	Magnetotransport studies of interfacial interactions in van der Waals structures
9	Jaroslav Fabian	Proximity spin interactions in 2D magnetic vdW (hetero)multilayers
10	Xinliang Feng, Thomas Heine, Thomas Weitz	Magnetic and electronic properties of graphene/MOFene superlattices
11	Jeison Fischer, Amilcar Bedoya Pinto	Non-collinear spin textures in magnetic moiré van der Waals heterostructures
12	Hans Tornatzky, Hua Lv	Tailoring (opto)spintronic phenomena by van-der-Waals heterostructure design
13	Fei Ding, Jonathan Finley, Rolf Haug	Tunable Moiré Potentials in 2D-Heterostructures using Anisotropic Strain
14	Kirill Bolotin	Fingerprinting, tailoring, and transporting excitons in strained 2D heterostructures
15	Emeline Nysten	Straintronics with van der Waals Ferroelectrics
16	Christoph Stampfer	Confining electrons in twisted and proximity-coupled bilayer graphene
17	Wolfgang Belzig, Angelo Di Bernardo, Elke Scheer, Hadar Steinberg	Towards 2D superconducting spintronics
18	Alexey Chernikov, Alexander Högele, Alexander Steinhoff-List	Quantum gases in moiré-ordered and reconstructed heterostructures: effective dimensionalities, hybrid states, and interactions
19	Dante Kennes, Tim Wehling, Ursula Wurstbauer	Correlations in van der Waals [Hetero]Structures by the Spectroscopic Fingerprints of Quasiparticles and Collective Excitations
20	Christopher Gies, Stephan Reitzenstein, Christian Schneider	Manybody non-linear and coherent phenomena in optical cavities with embedded van der Waals heterostructures: The bosonic versus the fermionic regime
21	Florian Arnold	Information from the SPP Office