

Summer School 2025

"Polaritons and spectroscopic methods"

Berlin, June 30 to July 2, 2025

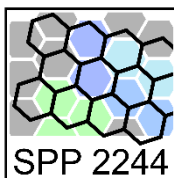
Hotel:

- Carolinenhof (Landhausstraße 10, 10717 Berlin)
- Hotel rooms are provided and paid for by the central project.
- Hotel rooms are available from Sunday, June 29, to Thursday, July 3, unless communicated otherwise with the organization committee during the registration process.

Venue of the scientific program:

- Tagungszentrum Schwedische Viktoriagemeinde
- Address: Landhausstraße 26, 10717 Berlin (200m from the hotel)
- Lab tours on Monday will take place at Freie Universität Berlin – Forschungsbau SupraFAB (Altensteinstraße 23a, 14195 Berlin)

Times	Sunday, June 29	Monday, June 30	Tuesday, July 01	Wednesday, July 02
08:00				
08:15				
08:30		Registration		
08:45		Opening		
09:00		Talk 1: Kirill Bolotin "Controlling excitons and polaritons"	Talk 5: Alexander Högele "Moiré exciton-polaritons"	Talk 8: Katja Höflich "Electron-Solid Interaction"
09:15				
09:30				
09:45				
10:00		Coffee break	Coffee break	Coffee break
10:15				
10:30		Talk 2: Stephanie Reich "Molecular-2D Material Heterostructures"	Mini-Workshop: Kirill Bolotin "Grants & Application Writing"	Talk 9: Hannah Nerl "Electron energy-loss spectroscopy for material science"
10:45				
11:00				
11:15				
11:30				
11:45				
12:00		Lunch break	Lunch break	Lunch break
12:15				
12:30				
12:45				
13:00		Talk 3: Iris Niehues "Scattering-type near-field microscopy and beyond: a route towards tip-based photoluminescence"	Poster session A	Talk 10: Luka Pirkner "TMDC-Metal Interfaces from Micro- and Nanoscale Perspectives"
13:15				
13:30				
13:45				
14:00		Coffee break	Poster session B	Coffee break
14:15				
14:30		Talk 4: Patryk Kusch "Near-field optical microscopy on TMDC heterostructures"		Talk 11: Thomas Taubner "Coupling of polaritons in 2D heterostructures"
14:45				
15:00			Coffee break	Closing
15:15				
15:30				
15:45				
16:00		Transfer to FU Berlin	Talk 6: Hélène Seiler "Ultrafast 2D spectroscopy of excitons and polaritons"	
16:15				
16:30				
16:45				
17:00		Lab tours Suprafab (SNOM + Cleanroom)	Coffee break	
17:15				
17:30			Talk 7: Alexey Chernikov "Light-emitting and mobile exciton complexes in 2D materials"	
17:45				
18:00				Social activity
18:15				
18:30				
18:45				
19:00	Welcome Dinner			
19:15		Dinner	Dinner	
19:30				
19:45				



Sunday, June 29

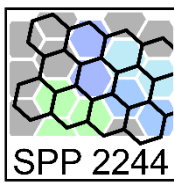
18:30	Welcome Dinner Parkcafé Berlin (Fehrbelliner Platz 8, 10707 Berlin)
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Monday, June 30

08:30 – 09:00	Registration
09:00 – 09:15	Opening Patryk Kusch, Florian Arnold
09:15 – 10:30	Talk 1: Kirill Bolotin (FU Berlin) "Controlling excitons and polaritons"
10:30 – 10:45	Coffee break
10:45 – 12:00	Talk 2: Stephanie Reich (FU Berlin) "Molecular-2D Material Heterostructure"
12:00 – 13:00	Lunch break
13:00 – 14:15	Talk 3: Iris Niehues (University of Münster) "Scattering-type near-field microscopy and beyond: a route towards tip-based photoluminescence"
14:15 – 14:30	Coffee break
14:30 – 15:45	Talk 4: Patryk Kusch (FU Berlin) "Near-field optical microscopy on TMDC heterostructures"
15:45 – 16:45	Transfer to FU Berlin
16:45 – 18:45	Lab tours Suprafab SNOM + Cleanroom
19:30	Dinner Alter Krug Dahlem (Königin-Luise-Straße 52, 14195 Berlin)

Tuesday, July 1

09:00 – 10:15	Talk 5: Alexander Högele (LMU Munich) "Moiré exciton-polaritons"
10:15 – 10:30	Coffee break
10:30 – 12:00	Mini-Workshop: Kirill Bolotin (FU Berlin) "Grants & Application Writing"
12:00 – 13:00	Lunch break
13:00 – 14:15	Poster session A Posters 1 – 12
14:15 – 15:30	Poster session B Posters 13 – 23
15:30 – 16:00	Coffee break
16:00 – 17:15	Talk 6: Hélène Seiler (FU Berlin) "Ultrafast 2D spectroscopy of excitons and polaritons"
17:15 – 17:30	Coffee break
17:30 – 18:45	Talk 7: Alexey Chernikov (TU Dresden) "Light-emitting and mobile exciton complexes in 2D materials"
19:30	Dinner Nicki's Mommsen Restaurant (Bleibtreustraße 17, 10623 Berlin)

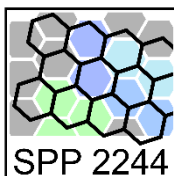


Wednesday, July 2

09:00 – 10:15	Talk 8: Katja Höflich (FBH Berlin) "Electron-Solid Interaction"
10:15 – 10:45	Coffee break
10:45 – 12:00	Talk 9: Hannah Nerl (HU Berlin) "Electron energy-loss spectroscopy for material science"
12:00 – 13:00	Lunch break
13:00 – 14:15	Talk 10: Luka Pirker (Heyrovsky Institute) "TMDC–Metal Interfaces from Micro- and Nanoscale Perspectives"
14:15 – 14:30	Coffee break
14:30 – 15:45	Talk 11: Thomas Taubner (RWTH Aachen) "Coupling of polaritons in 2D heterostructures"
15:45 – 16:00	Closing Petryk Kusch

Session chairs

Monday	Morning	Zamin Mamiyev	Talks 1+2
	Afternoon	Ali Mermoul	Talks 3+4
Tuesday	Morning	Amanda Tzorín	Talk 5 + Mini-Workshop
	Afternoon	Mikolaj Metelski	Talks 6+7
Wednesday	Morning	Ilias Oikonomou	Talks 8+9
	Afternoon	Julian Hirschmann	Talks 10+11



Poster	Presenter	Title
1	Felix Ehring	Acousto-optic characterization of van der Waals systems
2	Ke Xiao	Self-intercalation of Fe atoms in MBE grown Fe_3GeTe_2 thin films
3	Maximilian Scharpey	Nanoscale mapping of hBN color centers: Tip-enhanced and tip-assisted photoluminescence
4	Lina Jäckering	Tailoring hyperbolic phonon polaritons in van der Waals materials with the phase-change material In_3SbTe_2
5	Khairi Elyas	Optimizing Helium Ion Beam Milling to Minimize Beam Damage in the Patterning of Suspended hBN
6	Zamin Mamiyev	Surface-Enhanced Raman Spectroscopy of Epitaxial Graphene via Plasmonic Sn Nanoantennas
7	Shachi Machchhar	Cathodoluminescence Imaging of Localized and Delocalized Exciton Complexes in Transition Metal Dichalcogenide Monolayers
8	Bhabani Sankar Sahoo	Unveiling Interlayer Exciton Dynamics of HBL and HTL Heterostructure on Chirped DBR Substrate
9	Güven Budak Julian Hirschmann	Exciton-Polaritons and Magnons in the 2D Antiferromagnet CrSBr
10	Pablo Galan Vazquez	Electronic proximity effects in 2D materials integrated with ultrahigh-k dielectric oxide membranes
11	Ali Mermoul	Numerical Simulations of Electromagnetic Radiation Scattering of Free Monolayer Dielectric Microspheres
12	Priyanka Thawany	Global mapping of heterogeneities in two-dimensional materials
13	Minushree Rout	Transport of exciton complexes in the presence of Fermi sea of free carriers in monolayer semiconductors
14	Lara Blinov	Signatures of efficient intervalley scattering by acoustic phonons in $\text{WSe}_2/\text{MoSe}_2$ heterostructures
15	Hsin-Mei Ho	Ab initio study of anthracene- MoS_2 heterostructures: effects of interfaces on optical properties
16	Mikołaj Metelski	Gate-tunable Bose-Fermi mixture in a strongly correlated moiré bilayer electron system
17	Bent van Wingerden	Time-resolved Momentum Microscopy: A Methodological Overview
18	Sai Shradha	Excitonic Properties of Tailored CVD-Grown TMDs
19	Moritz Knaak	Towards proximity-control in Graphene/MOF-Heterostructures
20	Pavel Trofimov	Directed light emission in molecular monolayers on 2D materials via optical interferences
21	Ilias Oikonomou	Defect-Driven Magnetism and Emergent Phenomena in PtSe_2 /graphene Heterostructures
22	Raghav Dhingra	Strain Engineering Moiré Excitons in 2D Heterostructures
23	Tfyeche Tounsi	Inelastic tunneling into multipolaronic bound states in single-layer molybdenum disulfide