

Synaptic Schedule/Programme

SUNDAY 20 TH	MONDAY 21 ST	TUESDAY 22 ND	WEDNESDAY 23 RD	THURSDAY 24 TH
ARRIVAL	09:00-09:50 Dimas G. de Oteyza	09:00-09:50 Eva Y. Andrei	09:00-09:50 Thomas Michely	09:30-10:20 Simone Lisi
	09:50-10:15 A. San Miguel	09:50-10:15 A. Tamtögl	09:50-10:15 M. Batzill	10:20-10:45 M. M. Otrokov
	10:15-10:40 B. Senkovskiy	10:15-10:40 P. Merino	10:15-10:40 T. L. Lee	10:45-11:10 I. Delač-Marion
	10:40-11:05 S. Kraus	10:40-11:05 J. A. Delgado-Notario	10:40-11:05 M. Svec	11:10-11:35 COFFEE
	11:05-11:30 COFFEE	11:05-11:30 COFFEE	11:05-11:30 COFFEE	11:35-12:00 M. Will
	11:30-12:20 José A. Martín-Gago	11:30-12:20 Jaroslav Fabian	11:30-12:20 Philip Hofmann	12:00-12:25 D. Lizzit
	12:20-12:45 J. J. Navarro	12:20-12:45 J. Tesch	12:20-12:45 M. Petrović	12:25-12:35 CLOSURE
	12:45-13:10 B. de la Torre	12:45-13:10 D. Menzel	12:45-13:10 M. Garnica	DEPARTURE
	13:10-14:30 LUNCH	13:10-14:30 LUNCH	13:10-14:30 LUNCH	
16:00-18:50 WELCOME & REGISTRATION	14:30-15:20 Liv Hornekær	14:30-15:20 Sebastian Günther	16:00-20:00 EXCURSION / TOUR & CONFERENCE PICTURE	
	15:20-15:45 J. Knudsen	15:20-15:45 J. I. Cerdá		
	15:45-16:10 S. Simon	15:45-16:10 I. I. Klimovskikh		
	16:10-16:35 C. Romero-Muñiz	16:10-16:35 A. Sala		
18:50-19:00 OPENING	16:35-17:00 COFFEE	16:35-17:00 COFFEE		
Opening Key I 19:00-19:30 Enrique Diez	17:00-17:50 Camilla Coletti	17:00-17:50 Harold Zandvliet		
Opening Key II 19:30-20:00 Rodolfo Miranda	17:50-20:00 POSTERS	17:50-20:00 POSTERS		
20:00 COCKTAIL	20:00 DINNER	20:00 DINNER	20:00 BANQUET	

Detailed *Day-by-day* Schedule/Programme

DAY 0 – SUNDAY 20 TH	
ARRIVAL	
16:00-18:50	WELCOME & REGISTRATION
18:50-19:00	OPENING
Opening Key I 19:00-19:30	Enrique Diez (Univ. Salamanca): "Processing and characterization of nanoelectronics devices based on 2D materials"
Opening Key II 19:30-20:00	Rodolfo Miranda (IMDEA Nanosci.): "Magnetism in 2D"
20:00	COCKTAIL

DAY 1 – MONDAY 21ST

09:00-09:50 **Dimas G. de Oteyza (CSIC-UPV/EHU):** "Alternative growth strategies of atomically precise graphene nanoribbons"

09:50-10:15 **A. San Miguel (Univ. Lyon):** "High pressure in 2D science. From adhesion and mechanical properties to nanoribbon elaboration"

10:15-10:40 **B. Senkovskiy (Univ. Cologne):** "Revealing the electronic band structure of atomically precise graphene nanoribbons"

10:40-11:05 **S. Kraus (Univ. Cologne):** "Nanostructures of cyclooctatetraene with rare-earth metals on graphene"

11:05-11:30 **COFFEE**

11:30-12:20 **José A. Martín-Gago (ICMM-CSIC):** "Highly selective covalent organic functionalization of epitaxial graphene"

12:20-12:45 **J. J. Navarro (IMDEA Nanosci.):** "Switching the Kondo effect on TCNQ through a catalytic reaction in CH₂CN functionalized graphene on Ru(0001)"

12:45-13:10 **B. de la Torre (RCPTM):** "Spin-State control in metal-organic complex by positioning on N-doped graphene"

13:10-14:30 **LUNCH**

14:30-15:20 **Liv Hornekær (Univ. Aarhus):** "Controlling the electronic properties, reactivity and substrate interactions of graphene via intercalation and functionalization"

15:20-15:45 **J. Knudsen (Univ. Lund):** "Understanding how a super-dense water phase below graphene promotes O- and CO- intercalation"

15:45-16:10 **S. Simon (Univ. Konstanz):** "Layer-by-layer decoupling of twisted graphene sheets epitaxially grown on a metal substrate"

16:10-16:35 **C. Romero-Muñiz (UAM):** "Nitrogen doping of graphene on metals: Controlling corrugation and electronic properties with doping and oxygen intercalation"

16:35-17:00 **COFFEE**

17:00-17:50 **Camilla Coletti (IIT):** "Scalable van der Waals epitaxial heterostacks for optoelectronics"

17:50-20:00 **POSTERS**

20:00 **DINNER**

DAY 2 – TUESDAY 22ND

09:00-09:50 **Eva Y. Andrei (Univ. Rutgers):** "Physics of imperfect graphene"

09:50-10:15 **A. Tamtögl (TU Graz):** "Nanoscale mass transport on Dirac materials"

10:15-10:40 **P. Merino (ICMM-CSIC):** "Atomically-resolved edge states on surface-nanotemplated graphene explored at room temperature"

10:40-11:05 **J. A. Delgado-Notario (Univ. Salamanca):** "0.3 THz detection using an asymmetric dual grating gate graphene FET"

11:05-11:30 **COFFEE**

11:30-12:20 **Jaroslav Fabian (Univ. Regensburg):** "Orbital, spin, and magnetic proximity effects in single and bilayer graphene on 2D substrates"

12:20-12:45 **J. Tesch (Univ. Konstanz):** "Landau quantization in graphene/transition metal dichalcogenides probed at the local scale"

12:45-13:10 **D. Menzel (TUM):** "Ultrafast charge transfer from core-excited argon intercalated and compressed under graphene monolayers and in blisters"

13:10-14:30 **LUNCH**

14:30-15:20 **Sebastian Günther (TUM):** "Graphene synthesis by CVD on Cu for the construction of electron transparent membranes"

15:20-15:45 **J. I. Cerdá (ICMM-CSIC):** "Tuning the graphene on Ir(111) adsorption regime by Fe/Ir surface-alloying"

15:45-16:10 **I. I. Klimovskikh (State Univ. Saint Petersburg):** "Graphene on Gd-5d metals surface alloys – superlattice and spin-dependent effects"

16:10-16:35 **A. Sala (Univ. Trieste):** "Growth and electronic structure of graphene on Ni(100)"

16:35-17:00 **COFFEE**

17:00-17:50 **Harold Zandvliet (Univ. Twente):** "Novel elemental 2D materials"

17:50-20:00 **POSTERS**

20:00 **DINNER**

DAY 3 – WEDNESDAY 23RD

09:00-09:50 **Thomas Michely (Univ. Cologne):** “Graphene on Ir(111) as a growth platform for transition metal disulphide layers”

09:50-10:15 **M. Batzill (Univ. South Florida):** “Exploring layer-dependent properties of metallic 2D materials ”

10:15-10:40 **T. L. Lee (Diamond Light Source):** “Chemically resolved geometric structures of 2D materials”

10:40-11:05 **M. Svec (Czech Academy of Sciences):** “The Moiré pattern of a 2D iron oxide layer grown on α -Fe₂O₃(0001)”

11:05-11:30 **COFFEE**

11:30-12:20 **Philip Hofmann (Univ. Aarhus):** “Electronic structure and electron dynamics in novel two-dimensional materials”

12:20-12:45 **M. Petrović (Univ. Duisburg-Essen):** “Lateral heterostructures of hexagonal boron nitride and graphene: alloying and microstructuring”

12:45-13:10 **M. Garnica (TUM):** “h-BN on Cu(111): Geometric corrugation and intercalation of functional molecules”

13:10-14:30 **LUNCH**

16:00-20:00

**EXCURSION / TOUR
&
CONFERENCE PICTURE**

20:00 **BANQUET**

DAY 4 – THURSDAY 24TH

09:30-10:20 **Simone Lisi (Inst. Néel):** “Excitons in transition metal dichalcogenides vs. strain, defects and charged impurities”

10:20-10:45 **M. M. Otrokov (CFM-MPC Donosti):** “Evidence of large spin-orbit coupling effects in quasi-free-standing graphene on Pb/Ir(111)”

10:45-11:10 **I. Delač-Marion (CEMS):** “Atomic-scale defects and electronic properties of synthesized molybdenum disulphide monolayer”

11:10-11:35 **COFFEE**

11:35-12:00 **M. Will (Univ. Cologne):** “A monolayer of hexagonal boron nitride on Ir(111) as a template for cluster growth”

12:00-12:25 **D. Lizzit (Elettra – Sincrotrone Trieste):** “Single-orientation high-quality MoS₂ monolayers with complete spin polarization”

12:25-12:35 **CLOSURE**

DEPARTURE

List of Posters

- P1. Al Taleb A.** "Helium scattering from 2D Moiré superstructures: a new tool to characterize layered van der Waals heterostructures"
- P2. Arora S.** "Engineering excitons at the interface of two-dimensional semiconductors"
- P3. Ayani C. G.** "Controllable switching of the superconductivity of a tungsten STM tip on epitaxial graphene"
- P4. Cai J.** "Determination of graphene-hBN lateral interface structure on Ir(111)"
- P5. Clericò V.** "Coherent electron transport through graphene nanoconstrictions"
- P6. Coelho P. M.** "Post-synthesis metal incorporation into MoSe₂ or MoTe₂ leads to crystal modifications into metallic line-network"
- P7. Correa A.** "Self-texturizing electronic properties of a 2-dimensional GdAu₂ layer on Au(111): the role of out-of-plane atomic displacement"
- P8. De Vries N.** "Spectroscopic investigation of graphene nanoribbons showing room temperature ballistic electron transport"
- P9. Dombrowski D.** "Two phases of single layer tantalum disulfide on gold"
- P10. Estyunin D. A.** "Spin textures of graphene/Pb systems on various substrates"
- P11. Franke M.** "Investigation of hexagonal boron-nitride (hBN) and graphene Gr-R0° on SiC(0001)"
- P12. Biel B.** "Not all metals are the same: impact of metallic substrates on defected single-layer MoS₂"
- P13. Gómez-Herrero A. C.** "Two-dimensional molecular crystals with non-trivial electronic properties"
- P14. Hall I. J.** "Growth and structure of mono- to few-layer vanadium disulphide on graphene on Ir(111)"
- P15. Halle J.** "Inelastic excitations in bilayer graphene on Ru(0001)"
- P16. Kakhiani K.** "Morphology and reactivity: a DFT study on curved graphene"
- P17. Kansara I. S.** "Transport mechanism of ultrathin Fe-Co nanowires in self-assembled arrays"
- P18. Kralj M.** "Optical response of doped epitaxial graphene and chemically grown MoS₂"
- P19. Martínez J. I.** "Universal trends in the covalent functionalization of epitaxial graphene by amino-terminated organic molecules"
- P20. Morbec J. M.** "Electronic properties of monolayers, bilayers and heterostructures of group-III monochalcogenides"
- P21. Navarro J. J.** "Formation of a AuIr 2D alloy by intercalation of Au in graphene/Ir(111)"
- P22. Nguyen V. D.** "Studies on point defects and heterostructures of transition metal dichalcogenides"
- P23. Palacio I.** "Decoupling graphene from metals by electrochemical oxidation"
- P24. Panighel M.** "The FAST module: an add-on unit for driving commercial scanning probe microscopes to video rate and beyond"
- P25. Perna P.** "Chiral spin textures in intercalated graphene"
- P26. Pollmann E.** "Morphology and electronic properties of ultrathin molybdenum disulphide and tungsten disulphide grown on various substrates"
- P27. Pudikov D. A.** "Graphene synthesis via segregation of carbon atoms through a thin metal film: features of growth and electronic structure"
- P28. Redondo J.** "An efficient device for growth of graphene samples on 6H-SiC(0001)"
- P29. Pérez R.** "Tuning the chemical reactivity of graphene grown on metals"
- P30. Shah I. J.** "Temperature-Dependent Thermal Conductivity and Viscosity of Synthesized α -Alumina Nanofluids"
- P31. Shikin A.** "Spin-orbit and exchange coupling induced in graphene under contact with heavy and magnetic metals and possibility of topological phase formation"
- P32. Soubatch S.** "Dependence of the adsorption height of graphene-like adsorbates on their dimensionality"
- P33. Valerius P.** "Supported 2D materials under low energy He ion irradiation"
- P34. Cirera B.** "Relativistic dispersion of massive electrons in graphene nanoribbons"