



MAY 18-21 2026 FREDERICIA DENMARK

EUROPEAN WORKSHOP ON EPITAXIAL GRAPHENE & 2D MATERIALS

DAY 1

Arrival

- 14:30 - 15:45 Registration
- 15:45 - 16:00 Welcome & Opening Remarks

Chair: **Jill Miwa**

- 16:00 - 16:45 Keynote: **Roman Fasel**- Nanographene-based designer quantum spin systems
- 16:45 - 17:05 Highlight: **James McHugh** - Spin splitting and band-edge renormalisation in monolayer TMDs
- 17:05 - 17:25 Highlight: **Stefania Pagliara** - Tracking photoinduced dynamics in layered semi-conductors with ultrafast spectroscopies

- 19:00 - 20:30 Dinner

DAY 2

7:00 - 9:00

Breakfast

Chair: **Carsten Busse**

9:00 - 9:30

Invited: **Kristian Sommer Thygesen** - Building a digital infrastructure for 2D materials science

9:30 - 10:00

Invited: **Justin Wells** - Further enhancing the usually strong electron-phonon kinks in graphene and hBN

10:00 - 10:20

Contributed: **Miguel A. Valbuena** - Engineering a spin-orbit bandgap in graphene-tellurium-irridium heterostructures

10:20 - 10:40

Highlight: **Alberto Turoldo** - Interfacial oxidation enables charge-transfer contacts and degenerate n-doping in monolayer MoS₂

10:40 - 11:10

Coffee

Chair: **Carsten Busse**

11:10 - 11:40

Invited: **Antonija Grubišić-Čabo** - Preparation of large-area 2D materials using UHV-based KISS method

11:40 - 12:00

Contributed: **Catherine Grover** - Epitaxial growth of pristine 2D Ta-S-Se Janus membranes on Au(111)

12:00 - 12:20

Contributed: **Abdallah Karaka** - CoS₂: a new 2D material and its phase transitions

12:20 - 12:40

Contributed: **Matthias Batzill** - Mirror twin boundary phases in MoTe₂

12:40 - 14:10

Lunch

Chair: **Thomas Michely**

14:10 - 14:40

Invited: **Niklas Witt** - Dirac meets flat band: real-space switching of local moments driven by quantum geometry in correlated graphene heterostructures

14:40 - 15:00

Contributed: **Guangyao Miao** - Doping monolayer graphene to the Van Hove singularity

15:00 - 15:20

Contributed: **Affan Safeer** - Small polarons in single layer MnBr₂: substrate dependence and interaction with a super-moiré

15:20 - 15:40

Contributed: **Anshika Mishra** - Manipulation of polarons in monolayer NiBr₂

15:40 - 16:10

Coffee

Chair: **Thomas Michely**

16:10 - 16:40

Invited: **Peter Liljeroth** - Magnetic excitations in van der Waals quantum materials at the atomic scale

16:40 - 17:00

Contributed: **Dominik Legut** - Perpendicular magnetic anisotropy in a single Dy adatom ferrimagnet

17:00 - 17:20

Contributed: **Daniel Jansen** - Atomic manipulation on epitaxial 2D materials

17:20 - 17:40

Contributed: **Sandra Sajan** - Atomic-scale mapping of superconductivity in the incoherent CDW mosaic phase of a transition metal dichalcogenide

19:00 - 20:30

Dinner

20:30 - 22:00

Poster Session

DAY 3

7:00 - 9:00

Breakfast

Chair: **Matthias Batzill**

9:00 - 9:30

Invited: **Jeison Fischer** - Epitaxial growth pathways to magnetic order in novel 2D materials

9:30 - 9:50

Contributed: **David Serrate** - Atomic scale demonstration of ferromagnetism in a single layer FeCl₂ on Au(111)

9:50 - 10:20

Invited: **Marin Petrović** - Beyond pristine monolayer borophene: towards functionalization and bilayers

10:20 - 10:40

Contributed: **Patrick Seleš** - Fast synthesis of large hBN domains on commercial nickel foils by UHV-CVD

10:40 - 11:00

Contributed: **Marjolaine Cornu** - Heteroepitaxial growth of 2D BN films on Ni(111) by CVD with controlled thicknesses

11:00 - 11:30

Coffee

Chair: **Matthias Batzill**

11:30 - 12:00

Invited: **Irene Groot** - Growth of two-dimensional materials on liquid metal catalysts

12:00 - 12:20

Highlight: **Lars Mohrhusen** - TiS₂-based 2D nanocatalysts under reactive conditions

12:20 - 12:40

Contributed: **Thais Chagas** - Electronic structure and edge states in the 2D kagome Ta₂S₃ on Au(111)

12:40 - 12:55

Conference Photo

12:55 - 14:10

Lunch

14:10 - 19:00

Excursion



19:00 - 20:30

Dinner

20:30 - 22:00

Poster Session

DAY 4

7:00 - 9:00

Breakfast

Chair: **Oliver Gröning**

9:00 - 9:45

Keynote: **Roser Valentí** - Emergent correlations and topology in van der Waals heterostructures

9:45 - 10:05

Highlight: **Maarten Goesten** - Quasiatomic pore bands

10:05 - 10:25

Contributed: **Benjamen Lowe** - Strong electron correlations in 2D kagome metal-organic frameworks

10:25 - 10:45

Contributed: **J. Aaron Mendoza Rodarte** - Gold-Assisted Exfoliation of 2D Materials for Vacuum-Compatible Spectroscopy

10:45 - 11:15

Coffee

Chair: **Oliver Gröning**

11:15 - 11:35

Contributed: **Dina Wilks** - Electronic structure of multiferroic SnSe from monolayer to bulk

11:35 - 11:55

Contributed: **Ezequiel Tosi** - Thermally driven α - β phase transition and alloy formation in SnSe/Au(111)

11:55 - 12:15

Company: **Saumya Mukherjee (SPECS)** - Multifunctional momentum microscope for 2D material research

12:15 - 12:35

Company: **Vasileios Theofylaktopoulos (Heidelberg Instruments)** - Strain it, sculpt it, cut it: thermal scanning probe lithography in 2D materials research

12:35 - 14:05

Lunch

Chair: **Yuriy Dedkov**

14:05 - 14:35

Invited: **Hélène Seiler** - Probing electronic disorder in nanomaterials with coherent two-dimensional spectroscopy

14:35 - 15:05

Contributed: **Šimun Mandić** - Charge and resonant energy transfer in hybrid organic-TMDs heterostructures

15:05 - 15:35

Chair: **Yuriy Dedkov**

15:35 - 16:05

Invited: **Amilcar Bedoya-Pinto** - Recent developments in epitaxially grown 2D magnets: from 2D-XY systems to high-T_c magnets driven by self-intercalation

16:05 - 17:25

Contributed: **Antti Karjasita** - Evidence of multiferrocity in monolayer NiBr₂

17:25 - 17:45

Contributed: **Xue Li** - Ferroelectric domain boundaries as internal quantum wells in van der Waals TMDs



19:30 - 22:00

Conference Dinner

