

## Crystalline Solids and their Microstructure Division Fachverband Kristalline Festkörper und deren Mikrostruktur (KFM)

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### Overview of Invited Talks and Sessions (Lecture halls H10, H47, PHY 5.0.20, and PHY 5.0.21; Poster C)

#### Invited Talks

KFM 4.1	Mon	9:30–10:00	H47	<b>Mixing microwave and light: up-conversion and frequency combs</b> — ●HARALD G. L. SCHWEFEL
KFM 4.6	Mon	11:40–12:10	H47	<b>Nonlinear whispering gallery resonators for quantum optical technologies</b> — ●CHRISTOPH MARQUARDT
KFM 5.1	Mon	15:00–15:30	PHY 5.0.21	<b>On-surface synthesis by atomic manipulation studied with AFM</b> — ●LEO GROSS
KFM 6.1	Mon	15:00–15:30	PHY 5.0.20	<b>Fifteen years of electron magnetic circular dichroism</b> — ●JÁN RUSZ
KFM 6.6	Mon	17:10–17:40	PHY 5.0.20	<b>Advanced Imaging and Spectroscopy in an Ultrafast Transmission Electron Microscope</b> — ●ARMIN FEIST
KFM 8.5	Tue	11:10–11:40	PHY 5.0.20	<b>Development of Kinetic Inductance Detectors for polarimetric applications in plasma diagnostics</b> — ●FRANCESCO MAZZOCCHI, EDUARD DRIESSEN, SHIBO SHU, GIOVANNI GROSSETTI, DIRK STRAUSS, THEO SCHERER
KFM 9.1	Tue	9:30–10:00	PHY 5.0.21	<b>High Energy Density and Low Loss Dielectric Polymers for Electrical Applications</b> — ●LEI ZHU
KFM 9.5	Tue	11:20–11:50	PHY 5.0.21	<b>Storing electrical energy using glasses and glass ceramics</b> — ●MARTIN LETZ

#### Invited talks of the joint Symposium SKM Dissertation-Prize 2019

See SYSD for the full program of the symposium.

SYSD 1.1	Mon	9:30– 9:50	H2	<b>Synchronization and Waves in Confined Complex Active Media</b> — ●JAN FREDERIK TOTZ
SYSD 1.2	Mon	9:50–10:10	H2	<b>Spin scattering of topologically protected electrons at defects</b> — ●PHILIPP RÜSSMANN
SYSD 1.3	Mon	10:10–10:30	H2	<b>Beyond the molecular movie: Revealing the microscopic processes behind photo-induced phase transitions</b> — ●CHRIS W. NICHOLSON
SYSD 1.4	Mon	10:30–10:50	H2	<b>Thermodynamic bounds on current fluctuations</b> — ●PATRICK PIETZONKA
SYSD 1.5	Mon	10:50–11:10	H2	<b>Lightwave-driven quasiparticle acceleration</b> — ●FABIAN LANGER
SYSD 1.6	Mon	11:10–11:30	H2	<b>Ultrafast plasmon-driven point-projection electron microscopy</b> — ●JAN VOGELSANG
SYSD 1.7	Mon	11:30–11:50	H2	<b>Helimagnets, sand patterns and fingerprints linked by topology</b> — ●PEGGY SCHÖNHERR

#### Invited talks of the joint Symposium Mechanically Controlled Electrical Conductivity of Oxides

See SYCO for the full program of the symposium.

SYCO 1.1	Mon	9:30–10:00	H1	<b>Dislocation Dynamics and Their Conductivities in Oxides</b> — ●YUICHI IKUHARA
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SYCO 1.2	Mon	10:00–10:30	H1	<b>Strain effects in ionic conductivity and electrode processes</b> — ●JÜRGEN JANEK
SYCO 1.3	Mon	10:30–11:00	H1	<b>Elastic dipoles of point defects in materials</b> — ●CELINE VARVENNE
SYCO 1.4	Mon	11:30–12:00	H1	<b>Mapping strain/pressure with ZnO nanowire arrays by piezo-phototronic effect</b> — ●CAOFENG PAN
SYCO 1.5	Mon	12:00–12:30	H1	<b>Bulk and Flexo-photovoltaic effect</b> — ●MARIN ALEXE

### Invited talks of the joint Symposium Czech Republic as Guest of Honor

See SYCZ for the full program of the symposium.

SYCZ 1.1	Thu	9:30–10:00	H4	<b>Crystal symmetries and transport phenomena in antiferromagnets</b> — ●TOMAS JUNGWIRTH
SYCZ 1.2	Thu	10:00–10:30	H4	<b>Terahertz subcycle charge and spin control</b> — ●RUPERT HUBER
SYCZ 1.3	Thu	10:30–11:00	H4	<b>1D molecular system on surfaces</b> — ●PAVEL JELINEK
SYCZ 1.4	Thu	11:15–11:45	H4	<b>Tunneling microscopy on insulators provides access to out-of-equilibrium charge states</b> — ●JASCHA REPP
SYCZ 1.5	Thu	11:45–12:15	H4	<b>Occam’s razor and complex networks from brain to climate</b> — ●JAROSLAV HLINKA
SYCZ 1.6	Thu	12:15–12:45	H4	<b>Long range temporal correlations in complex systems</b> — ●HOLGER KANTZ

### Invited talks of the joint Symposium Interactions and Spin in 2D Heterostructures

See SYIS for the full program of the symposium.

SYIS 1.1	Thu	15:00–15:30	H1	<b>Magic Angle Graphene: a New Platform for Strongly Correlated Physics</b> — ●PABLO JARILLO-HERRERO
SYIS 1.2	Thu	15:30–16:00	H1	<b>Bilayer Graphene Quantum Devices</b> — ●KLAUS ENSSLIN
SYIS 1.3	Thu	16:00–16:30	H1	<b>Light-Matter interaction in van der Waals heterostructures</b> — ●TOBIAS KORN
SYIS 1.4	Thu	16:45–17:15	H1	<b>Spin transport in Van der Waals materials and heterostructures</b> — ●BART VAN WEES
SYIS 1.5	Thu	17:15–17:45	H1	<b>Flipping the valley in graphene quantum dots</b> — ●MARKUS MORGENSTERN

### Sessions

KFM 1.1–1.3	Sun	16:00–18:15	H10	<b>Tutorial: Diamond-Growth, characterization, electronics and applications (joint session KFM/TUT)</b>
KFM 2.1–2.4	Mon	9:30–11:10	PHY 5.0.20	<b>Microstructure of Thin Films / Crystal Structure</b>
KFM 3.1–3.4	Mon	9:30–11:10	PHY 5.0.21	<b>Dielectric, Elastic and Electromechanical Properties</b>
KFM 4.1–4.10	Mon	9:30–13:30	H47	<b>Focus: Whispering-Gallery-Mode Resonators</b>
KFM 5.1–5.4	Mon	15:00–16:30	PHY 5.0.21	<b>Instrumentation for Micro-/Nano-Analysis and Lithography/Structuring (joint session KFM/DS/O)</b>
KFM 6.1–6.9	Mon	15:00–18:40	PHY 5.0.20	<b>Focus: Advanced TEM spectroscopy - low energy excitations and chemical composition at high resolution (joint session KFM/HL)</b>
KFM 7.1–7.9	Mon	15:00–18:30	H47	<b>Multiferroics</b>
KFM 8.1–8.6	Tue	9:30–12:00	PHY 5.0.20	<b>Diamond I (joint session KFM/HL)</b>
KFM 9.1–9.8	Tue	9:30–12:50	PHY 5.0.21	<b>Focus: Materials for Energy Storage</b>
KFM 10.1–10.11	Tue	9:30–12:50	H47	<b>Ferroics - Domains and Domain Walls</b>
KFM 11.1–11.6	Tue	14:00–15:45	H37	<b>Multiferroics and Magnetoelectric coupling I (joint session MA/KFM)</b>
KFM 12.1–12.5	Wed	9:30–11:30	PHY 5.0.20	<b>Diamond II (joint session KFM/HL)</b>
KFM 13.1–13.7	Wed	9:30–12:10	H47	<b>Microscopy, Tomography and Spectroscopy with X-ray Photons, Electrons, Ions and Positrons (joint session KFM/HL)</b>
KFM 14.1–14.36	Wed	16:00–18:30	Poster C	<b>Postersession KFM</b>
KFM 15	Wed	18:30–19:00	PHY 5.0.21	<b>Annual General Meeting of the KFM division</b>

KFM 16.1–16.9    Fri    9:30–11:45    H39    **Multiferroics and Magnetoelectric coupling II (joint session MA/KFM)**

**Annual General Meeting of the Crystalline Solids and their Microstructure Division**

Mittwoch 18:30–19:00 PHY 5.0.21

- Bericht
- Wahl
- Verschiedenes