

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

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Invited Talks

KFM 1.1	Tue	10:00–10:30	H2	Effect of humidity on the ferroelectric domain wall dynamics in Ba-TiO₃ thin films — IRENA SPASOJEVIC, ALBERT VERDAGUER, GUSTAU CATALAN, ●NEUS DOMINGO
KFM 1.5	Tue	11:30–12:00	H2	Magnetic avalanche of non-oxide conductive domain walls — ●SOMNATH GHARA, KORBINIAN GEIRHOS, LUKAS KUERTEN, PETER LUNKENHEIMER, VLADIMIR TSURKAN, MANFRED FIEBIG, ISTVÁN KÉZSMÁRKI
KFM 4.1	Tue	14:15–14:45	H2	Single crystal diamond growth by chemical vapor deposition for high-end applications: Recent trends and state of the art — ●MATTHIAS SCHRECK, THEODOR GRÜNWARD
KFM 4.2	Tue	14:45–15:15	H2	Development of diamond based kinetic inductance detectors — ●FRANCESCO MAZZOCCHI, DIRK STRAUSS, THEO SCHERER

Invited talks of the joint symposium SKM Dissertation Prize 2021 (SYSD)

See SYSD for the full program of the symposium.

SYSD 1.1	Mon	10:00–10:25	Audimax 2	Avoided quasiparticle decay from strong quantum interactions — ●RUBEN VERRESEN, RODERICH MOESSNER, FRANK POLLMANN
SYSD 1.2	Mon	10:25–10:50	Audimax 2	Co-evaporated Hybrid Metal-Halide Perovskite Thin-Films for Optoelectronic Applications — ●JULIANE BORCHERT
SYSD 1.3	Mon	10:55–11:20	Audimax 2	Attosecond-fast electron dynamics in graphene and graphene-based interfaces — ●CHRISTIAN HEIDE
SYSD 1.4	Mon	11:20–11:45	Audimax 2	The thermodynamics of stochastic systems with time delay — ●SARAH A.M. LOOS
SYSD 1.5	Mon	11:50–12:15	Audimax 2	First Results on Atomically Resolved Spin-Wave Spectroscopy by TEM — ●BENJAMIN ZINGSEM

Invited talks of the joint symposium Novel phases and dynamical properties of magnetic skyrmions (SYMS)

See SYMS for the full program of the symposium.

SYMS 1.1	Tue	10:00–10:30	Audimax 2	Imaging skyrmions in synthetic antiferromagnets by single spin relaxometry — ●AURORE FINCO
SYMS 1.2	Tue	10:30–11:00	Audimax 2	Microwave spectroscopy of the skyrmionic states in a chiral magnetic insulator — ●AISHA AQEEL, JAN SAHLIGER, TAKUYA TANIGUCHI, STEFAN MAENDL, DENIS METTUS, HELMUTH BERGER, ANDREAS BAUER, MARKUS GARST, CHRISTIAN PFLEIDERER, CHRISTIAN H. BACK
SYMS 1.3	Tue	11:15–11:45	Audimax 2	Archimedean Screw in Driven Chiral Magnets — ●NINA DEL SER
SYMS 1.4	Tue	11:45–12:15	Audimax 2	Frustration-driven magnetic fluctuations as the origin of the low-temperature skyrmion phase in Co₇Zn₇Mn₆ — ●JONATHAN WHITE, VICTOR UKLEEV, KOSUKE KARUBE, PETER DERLET, CHEN-NAN WANG, HUBERTUS LUETKENS, DAISUKE MORIKAWA, AKIKO KIKKAWA, LUCILE MANGIN-THRO, ANDREW WILDES, YUICHI YAMASAKI, YUICHI YOKOYAMA, LE YU, CINTHIA PIAMONTEZE, NICOLAS JAOUEN, YUSUKE TOKUNAGA, HENRIK RØNNOW, TAKA-HISA ARIMA, YOSHINORI TOKURA, JONATHAN WHITE

SYMS 1.5 Tue 12:15–12:45 Audimax 2 **Magnetic Skyrmions as Topological Multi-Media Influencers** —
•SEBASTIÁN A. DÍAZ

Prize talks of the joint Awards Symposium (SYAW)

See SYAW for the full program of the symposium.

SYAW 1.1 Wed 13:30–14:00 Audimax 1 **Organic semiconductors - materials for today and tomorrow** —
•ANNA KÖHLER

SYAW 1.2 Wed 14:00–14:30 Audimax 1 **PbTe/CdTe nanocomposite as an attractive candidate for room-temperature infrared detectors** — •GRZEGORZ KARCZEWSKI

SYAW 1.3 Wed 14:40–15:10 Audimax 1 **Fingerprints of correlation in electronic spectra of materials** —
•LUCIA REINING

SYAW 1.4 Wed 15:10–15:40 Audimax 1 **Artificial Spin Ice: From Correlations to Computation** — •NAËMI LEO

SYAW 1.5 Wed 15:40–16:10 Audimax 1 **From microwave optomechanics to quantum transport – carbon nanotubes as highly versatile hybrid devices** — •ANDREAS K. HÜTTEL

SYAW 1.6 Wed 16:20–16:50 Audimax 1 **Quantum spin dynamics of a spin-1/2 antiferromagnetic Heisenberg-Ising chain** — •ZHE WANG

SYAW 1.7 Wed 16:50–17:20 Audimax 1 **Imaging the effect of electron transfer at the atomic scale** —
•LAERTE PATERA

Invited talks of the joint symposium Spain as Guest of Honor (SYES)

See SYES for the full program of the symposium.

SYES 1.1 Wed 13:30–13:40 Audimax 2 **DFMC-GEFES** — •JULIA HERRERO-ALBILLOS

SYES 1.2 Wed 13:40–14:10 Audimax 2 **Towards Phononic Circuits based on Optomechanics** — •CLIVIA M. SOTOMAYOR TORRES

SYES 1.3 Wed 14:10–14:40 Audimax 2 **Adding magnetic functionalities to epitaxial graphene** —
•RODOLFO MIRANDA

SYES 1.4 Wed 14:45–15:15 Audimax 2 **Bringing nanophotonics to the atomic scale** — •JAVIER AIZPURUA

SYES 1.5 Wed 15:15–15:45 Audimax 2 **Hydrodynamics of collective cell migration in epithelial tissues** —
•JAUME CASADEMUNT

SYES 1.6 Wed 15:45–16:15 Audimax 2 **Understanding the physical variables driving mechanosensing** —
•PERE ROCA-CUSACHS

Invited talks of the joint symposium Diversity on the Device Scale (SYHN)

See SYHN for the full program of the symposium.

SYHN 1.1 Thu 10:00–10:30 Audimax 1 **Scaling behavior of stiffness and strength of hierarchical network nanomaterials** — •SHAN SHI

SYHN 1.2 Thu 10:30–11:00 Audimax 1 **Functional and programmable DNA nanotechnology** — •LAURA NA LIU

SYHN 1.3 Thu 11:15–11:45 Audimax 1 **Multivalent nanoparticles for targeted binding** — •STEFANO ANGIOLETTI-UBERTI

SYHN 1.4 Thu 11:45–12:15 Audimax 1 **Programming Nanoscale Self-Assembly** — •OLEG GANG

SYHN 1.5 Thu 12:15–12:45 Audimax 1 **Achieving Global Tunability via Local Programming of a Structure's Composition** — •JOCHEN MUELLER

Sessions

KFM 1.1–1.8	Tue	10:00–12:45	H2	Focus Session I: Ferroics - Domains and Domain Walls
KFM 2.1–2.2	Tue	11:15–11:45	H5	
KFM 3.1–3.2	Tue	13:30–14:00	H2	Focus Session II: Ferroics - Domains and Domain Walls
KFM 4.1–4.5	Tue	14:15–16:15	H2	Focus Session III: Diamond
KFM 5.1–5.24	Tue	16:00–17:00	P	Poster Session KFM
KFM 6.1–6.12	Wed	10:00–13:15	H5	Skyrmions I (joint session MA/KFM)

KFM 7.1–7.3	Wed	10:00–10:45	H1	Dielectric, Elastic and Electromechanical Properties
KFM 8.1–8.4	Wed	10:45–11:45	H1	Crystal Structure / Real Structure / Microstructure
KFM 9.1–9.3	Wed	12:00–12:45	H1	Instrumentation and Methods
KFM 10	Wed	13:00–13:30	MVKFM	Annual General Meeting of the KFM division
KFM 11.1–11.9	Thu	13:30–16:15	H3	Organic Electronics and Photovoltaics, Electrical and Optical Properties (joint session CPP/KFM)
KFM 12.1–12.12	Fri	10:00–13:15	H5	Skyrmions II (joint session MA/KFM)
KFM 13.1–13.10	Fri	10:00–12:45	H7	Topological Insulators and Semimetals (joint session TT/KFM)

Annual General Meeting of the Crystalline Solids and their Microstructure Division

Mittwoch 13:00–13:30 MVKFM

- Bericht
- Verschiedenes