Magnetism Division
Fachverband Magnetismus (MA)

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Overview of Invited Talks and Sessions

(Lecture halls H16, H17, H18, H19, H20, and H36; Poster P1 and P3)

Invited Talks

MA 5.1	Mon	9:30–10:00	H20	**Driving Coherent Phonon-Phonon Angular Momentum Transfer via Lattice Anharmonicity** — •Sebastian Maehrlein
MA 5.2	Mon	10:00–10:30	H20	**Chiral phonons, phono-magnetism, and spin-rotation coupling** — •Matthias Geilhufe
MA 5.3	Mon	10:30–11:00	H20	**Geometry of temporal chiral structures and photoinduced chirality-spin coupling** — •Olga Smirnova, Philip Flores, Aycke Roos, David Ayuso, Piero Decleva, Stefanos Carlstroem, Serguei Patchkovskii, Andres Ordonez
MA 5.4	Mon	11:15–11:45	H20	**Phonon thermal Hall effect** — •Kamran Behnia
MA 5.5	Mon	11:45–12:15	H20	**Giant effective magnetic moment of chiral phonons** — •Swati Chaudhary, Dominik Juraschek, Martin Rodriguez-Vega, Gregory A Fiete
MA 6.1	Mon	15:00–15:30	H16	**Magnetization dynamics of chiral helimagnetic insulators** — •Aisha Aqeel
MA 7.1	Mon	15:00–15:20	H18	**Realizing Reservoir Computing with skyrmions in geometrical confinements tuned by ion irradiation** — •Grischa Beneke
MA 7.2	Mon	15:20–15:40	H18	**Low-energy spin excitations of the Kitaev candidate material $Na_2Co_2TeO_6$ probed by high-field/high-frequency electron spin resonance spectroscopy** — •Luca Bischof, Jan Arneth, Kwang-Yong Choi, Raju Kalaivanan, Raman Sankar, Rüdiger Klingeler
MA 7.3	Mon	15:40–16:00	H18	**Tailoring the first-order magnetostructural phase transition in Ni-Mn-Sn for caloric applications by microstructure** — •Johannes Puy, Enrico Bruder, Oliver Gutfleisch, Franziska Scheibel
MA 7.4	Mon	16:15–16:40	H18	**Tuning the properties of two-dimensional magnetic heterostructures via interface engineering with molecular and inorganic van der Waals crystals.** — •Carla Boix-Constant, Samuel Mañas-Valero, Eugenio Coronado
MA 7.5	Mon	16:40–17:05	H18	**Theoretical Prediction for Probing Magnon Topology** — •Robin R. Neumann
MA 7.6	Mon	17:05–17:30	H18	**Multiphysics-Multiscale Simulation of Additively Manufactured Functional Materials** — •Yangyiwei Yang
MA 23.1	Wed	9:30–10:00	H20	**Magneto-transport effects in crystalline magnetic films** — •Sebastian T. B. Goennenwein
MA 23.2	Wed	10:00–10:30	H20	**Cubic magneto-optic Kerr effect in thin films depending on structural domain twinning and crystal orientation** — •Robin Silber, Maik Gaerner, Jaroslav Hamrle, Timo Kuschel
MA 23.5	Wed	11:15–11:45	H20	**electrical and optical detection of the multipolar structure in the magnetization space** — •Dazhi Hou
MA 23.9	Wed	12:30–13:00	H20	**Ultrafast Néel order dynamics detected by time-resolved magneto-optical Voigt effect** — •Haibin Zhao
MA 30.1	Wed	16:00–16:30	H18	**Boosting Coercivity in Additively Manufactured Magnets Through Nano-Functionalization of NdFeB Powder** — •Anna Ziefuss
MA 35.1	Thu	9:35–10:05	H20	**Artificial Intelligence for Materials Science: Critical Importance of Rare Events, Active Learning, and Uncertainties** — •Matthias Scheffler

MA 35.2	Thu	10:05–10:35	H20	**Physics meets data: decoding magnetic inhomogeneities through latent analysis** — •Karin Everschor-Sitte
MA 35.3	Thu	10:35–11:05	H20	**AI used for micromagnetic simulations** — •Thomas Schrefl, Felix Lasthofer, Qais Ali, Heisam Moustafa, Harald Oezelt, Alexander Kovacs, Masao Yano, Noritsugu Sakuma, Akihito Kinoshita, Tetsuya Shoji, Akira Kato
MA 35.4	Thu	11:15–11:45	H20	**Future method for estimating parameters in magnetic films using machine learning** — •Kenji Tanabe
MA 38.1	Thu	15:00–15:30	H18	**Liquid-mediated surface-surface interactions investigated by close-to-surface magnetic particle transport** — •Rico Huhnstock, Yahya Shubbak, Arno Ehresmann
MA 39.1	Thu	15:00–15:30	H19	**Voltage control of magnetism using hydrogen** — •Markus Gössler

Invited Talks of the joint SKM Dissertationspreis 2025 (SYSD)

See SYSD for the full program of the symposium.

SYSD 1.1	Mon	9:30–10:00	H2	**Nanoscale Chemical Analysis of Ferroic Materials and Phenomena** — •Kasper Aas Hunnestad
SYSD 1.2	Mon	10:00–10:30	H2	**Advanced Excitation Schemes for Semiconductor Quantum Dots** — •Yusuf Karli
SYSD 1.3	Mon	10:30–11:00	H2	**Aspects and Probes of Strongly Correlated Electrons in Two-Dimensional Semiconductors** — •Clemens Kuhlenkamp
SYSD 1.4	Mon	11:00–11:30	H2	**Mean back relaxation and mechanical fingerprints: simplifying the study of active intracellular mechanics** — •Till Münker
SYSD 1.5	Mon	11:30–12:00	H2	**Coherent Dynamics of Atomic Spins on a Surface** — •Lukas Veldman

Invited Talks of the joint Symposium AI-driven Materials Design: Recent Developments, Challenges and Perspectives (SYMD)

See SYMD for the full program of the symposium.

SYMD 1.1	Mon	15:00–15:30	H1	**Learning physically constrained microscopic interaction models of functional materials** — •Boris Kozinsky
SYMD 1.2	Mon	15:30–16:00	H1	**GRACE universal interatomic potential for materials discovery and design** — •Ralf Drautz
SYMD 1.3	Mon	16:00–16:30	H1	**Multiscale Modelling & Machine Learning Algorithms for Catalyst Materials: Insights from the Oxygen Evolution Reaction** — •Nong Artrith
SYMD 1.4	Mon	16:45–17:15	H1	**Inverse Design of Materials** — •Hongbin Zhang
SYMD 1.5	Mon	17:15–17:45	H1	**Data-Driven Materials Science** — •Miguel Marques

Invited Talks of the joint Symposium Pushing the Boundaries of Fair Data Practices for Condensed Matter Insights: From Workflows to Machine Learning (SYFD)

See SYFD for the full program of the symposium.

SYFD 1.1	Wed	9:30–10:00	H1	**Pushing the Boundaries of Fair Data Practices for Condensed Matter Insight** — •Astrid Schneidwind
SYFD 1.2	Wed	10:00–10:30	H1	**Establishing Workflows of Experimental Solar Cell Data into NOMAD** — Edgar Nandayapa, Paolo Graniero, Jose Marquez, Michael Götte, •Eva Unger
SYFD 1.3	Wed	10:30–11:00	H1	**Building up the EOSC Federation** — •Ute Gunsenheimer
SYFD 1.4	Wed	11:15–11:45	H1	**Data-Driven Materials Science for Energy-Sustainable Applications** — •Jacqueline Cole
SYFD 1.5	Wed	11:45–12:15	H1	**Machine Learning and FAIR Data in X-ray Surface Science** — •Stefan Kowarik

Invited Talks of the joint Symposium Spins in Molecular Systems: Strategies and Effects of

Hyperpolarization (SYMS)

See SYMS for the full program of the symposium.

SYMS 1.1	Wed	15:00–15:30	H1	**Exploring the Non-Perturbative Magnetic Resonance Drive Regime with spin selection rules in a π-Conjugated Polymer** — •Christoph Boehme
SYMS 1.2	Wed	15:30–16:00	H1	**The puzzle of spin and charge transport in the chirality induced spin selectivity effect** — •Bart van Wees
SYMS 1.3	Wed	16:00–16:30	H1	**Nano- and Microscale NMR spectroscopy with spin qubits in diamond** — •Nabeel Aslam
SYMS 1.4	Wed	16:45–17:15	H1	**Spin effects in adsorbed organometallic complexes** — •Richard Berndt
SYMS 1.5	Wed	17:15–17:45	H1	**Quantum Computing with Molecules** — •Mario Ruben

Invited Talks of the joint Symposium Electronic Structure Theory for Quantum Technology: From Complex Magnetism to Topological Superconductors and Spintronics (SYES)

See SYES for the full program of the symposium.

SYES 1.1	Fri	9:30–10:00	H1	**Ab-initio Design of superconductors** — •Lilia Boeri
SYES 1.2	Fri	10:00–10:30	H1	**Topological superconductivity from first principles** — Bendegúz Nyári, András Lászlóffy, Levente Rózsa, Gábor Csire, Balázs Újfalussy, •László Szunyogh
SYES 1.3	Fri	10:30–11:00	H1	**First-principles study and mesoscopic modeling of two-dimensional spin and orbital fluctuations in FeSe** — •Myrta Grüning, Abyay Ghosh, Piotr Chudzinski
SYES 1.4	Fri	11:15–11:45	H1	**Non-collinear magnetism in 2D materials from first principles: Multiferroic order and magnetoelectric effects.** — •Thomas Olsen
SYES 1.5	Fri	11:45–12:15	H1	**Spin-phonon and magnon-phonon interactions from first principles** — •Marco Bernardi

Sessions

MA 1.1–1.3	Sun	16:00–18:15	H4	**Into the Third (and Fourth) Dimension: Imaging Methods for 3D Nanomagnetism (joint session MA/TUT)**
MA 2.1–2.10	Mon	9:30–12:15	H16	**Multiferroics and Magnetoelectric Coupling (joint session MA/KFM)**
MA 3.1–3.13	Mon	9:30–13:00	H18	**Magnonics I**
MA 4.1–4.9	Mon	9:30–11:45	H19	**Electron Theory of Magnetism and Correlations**
MA 5.1–5.8	Mon	9:30–13:00	H20	**Focus Session: Magnetic Phenomena from Phonon Chirality and Angular Momentum I (joint session MA/TT)**
MA 6.1–6.12	Mon	15:00–18:30	H16	**Skyrmions I**
MA 7.1–7.6	Mon	15:00–18:00	H18	**INNOMAG e.V. Prizes 2025 (Diplom-/Master and Ph.D. Thesis)**
MA 8.1–8.9	Mon	15:00–17:15	H19	**Spin-Dependent Phenomena in 2D (joint session MA/HL)**
MA 9.1–9.13	Mon	15:00–18:30	H20	**Altermagnets I**
MA 10.1–10.12	Tue	9:30–12:45	H16	**Focus Session: Magnetic Phenomena from Phonon Chirality and Angular Momentum II (joint session MA/TT)**
MA 11.1–11.14	Tue	9:30–13:15	H18	**Spin Transport and Orbitronics, Spin-Hall Effects I (joint session MA/TT)**
MA 12.1–12.8	Tue	9:30–11:30	H19	**Magnetization Dynamics and Damping**
MA 13.1–13.13	Tue	9:30–13:00	H20	**Altermagnets II**
MA 14.1–14.9	Tue	9:30–13:15	H36	**Focus Session: Strongly Correlated Quantum States in Moire Heterostructures (joint session TT/HL/MA)**
MA 15.1–15.48	Tue	10:00–12:30	P1	**Poster I**
MA 16.1–16.5	Tue	14:00–15:15	H16	**Topological Insulators (joint session MA/HL)**
MA 17.1–17.4	Tue	14:00–15:00	H18	**Micro- and Nanostructured Magnetic Materials**
MA 18.1–18.6	Tue	14:00–15:30	H19	**Functional Antiferromagnetism**
MA 19.1–19.5	Tue	14:00–15:15	H20	**Magnetic Imaging and Sensors**
MA 20.1–20.14	Wed	9:30–13:15	H16	**Magnonics II**
MA 21.1–21.12	Wed	9:30–12:45	H18	**Frustrated Magnets I**
MA 22.1–22.8	Wed	9:30–11:30	H19	**Caloric Effects in Ferromagnetic Materials**

MA 23.1–23.9	Wed	9:30–13:00	H20	**Focus Session: Magneto-Transport and Magneto-Optics of Higher Orders in Magnetization I**
MA 24.1–24.7	Wed	9:30–12:45	H36	**Focus Session: Nonlinear Spectroscopy of Collective Excitations in Quantum Magnets (joint session TT/MA)**
MA 25.1–25.2	Wed	15:00–15:30	H15	**Focus Session: Physics of the van der Waals Magnetic Semiconductor CrSBr I (joint session HL/MA)**
MA 26.1–26.14	Wed	15:00–18:45	H16	**Ultrafast Magnetization Effects I**
MA 27.1–27.3	Wed	15:00–15:45	H18	**Focus Session: Magneto-Transport and Magneto-Optics of Higher Orders in Magnetization II**
MA 28.1–28.9	Wed	15:00–17:30	H19	**Cooperative Phenomena: Spin Structures and Magnetic Phase Transitions**
MA 29.1–29.14	Wed	15:00–18:45	H20	**Skyrmions II**
MA 30.1–30.7	Wed	16:00–18:00	H18	**Bulk Materials: Soft and Hard Permanent Magnets**
MA 31.1–31.47	Wed	17:00–19:30	P1	**Poster II**
MA 32.1–32.6	Wed	17:30–19:00	H19	**Spin Transport and Orbitronics, Spin-Hall Effects II (joint session MA/TT)**
MA 33.1–33.13	Thu	9:30–13:00	H16	**Non-Skyrmonic Magnetic Textures I**
MA 34.1–34.12	Thu	9:30–12:45	H18	**Molecular Magnetism**
MA 35.1–35.5	Thu	9:30–13:00	H20	**PhD Focus Session: Using Artificial Intelligence Tools in Magnetism**
MA 36.1–36.7	Thu	9:30–12:45	H36	**Focus Session: Ising Superconductivity in Monolayer Transition Metal Dichalcogenides (joint session TT/HL/MA)**
MA 37.1–37.10	Thu	15:00–17:45	H16	**Magnetic Imaging Techniques**
MA 38.1–38.10	Thu	15:00–18:00	H18	**Magnetic Particles / Clusters & Biomagnetism**
MA 39.1–39.7	Thu	15:00–17:00	H19	**Magnetic Thin Films**
MA 40.1–40.10	Thu	15:00–17:45	H20	**Frustrated Magnets II**
MA 41.1–41.47	Thu	15:00–17:30	P3	**Poster III**
MA 42	Thu	18:00–19:00	H20	**Members' Assembly**
MA 43.1–43.14	Fri	9:30–13:15	H16	**Skyrmions III / Non-Skyrmionic Magnetic Textures II**
MA 44.1–44.8	Fri	9:30–13:00	H17	**Focus Session: Physics of the van der Waals Magnetic Semiconductor CrSBr II (joint session HL/MA)**
MA 45.1–45.11	Fri	9:30–12:30	H18	**Computational Magnetism**
MA 46.1–46.11	Fri	9:30–12:30	H19	**Surface Magnetism**
MA 47.1–47.6	Fri	9:30–11:00	H20	**Altermagnets III**
MA 48.1–48.7	Fri	11:15–13:00	H20	**Ultrafast Magnetization Effects II**

Members' Assembly of the Magnetism Division

Thursday 18:00–19:00 H20

- Bericht
- Verschiedenes