

## Magnetism Division Fachverband Magnetismus (MA)

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### Overview of Invited Talks and Sessions

(Lecture halls HSZ/0002, HSZ/0004, POT/0112, POT/0151, POT/351, and POT/361; Poster P2 and P4)

#### Invited Talks

MA 1.1	Sun	16:00–16:30	TRE/PHYS	<b>Recent advances and challenges in magnetic structure determination</b> — •DMYTRO INOSOV
MA 4.1	Mon	9:30–10:00	POT/0151	<b>From ML to Kinetics: Modeling the Switching in Ferroelectric Wurtzites</b> — •ANDREW RAPPE, DREW BEHRENDT, ATANU SAMANTA, VON BRAUN NASCIMENTO
MA 4.2	Mon	10:00–10:30	POT/0151	<b>Topological order parameter switching</b> — •SERGEY ARTYUKHIN
MA 4.3	Mon	10:30–11:00	POT/0151	<b>Optical Control of Ferroaxial Order via Circular Phonon Excitation</b> — •ZHIYANG ZENG, MICHAEL FÖRST, MICHAEL FECHNER, DHARMALINGAM PRABHAKARAN, PAOLO RADAELLI, ANDREA CAVALIERI
MA 10.1	Mon	15:00–15:20	POT/0112	<b>Multi-field analysis of magnetic materials: Phase-field based simulations of magnetic domains and phase transition</b> — •MOBINA ALAEDDINI, JÖRG SCHRÖDER, MAXIMILIAN VORWERK
MA 10.2	Mon	15:20–15:40	POT/0112	<b>Realistic Modelling of Finite Temperature Electron Transport Properties in Ferromagnets</b> — •FABIAN ENGELKE, CHRISTIAN HEILIGER
MA 10.3	Mon	15:55–16:20	POT/0112	<b>Exploring magneto- and multicaloric materials for room and cryogenic temperature applications</b> — •BENEDIKT BECKMANN
MA 10.4	Mon	16:20–16:45	POT/0112	<b>Nonlinear magnon dynamics: From the discovery of Floquet magnons to CMOS-compatible magnon computing</b> — •CHRISTOPHER HEINS
MA 10.5	Mon	16:45–17:10	POT/0112	<b>The geometric memory of quantum wave functions</b> — •NICLAS HEINSDORF
MA 10.6	Mon	17:10–17:35	POT/0112	<b>Altermagnets and Odd-parity-wave Magnets</b> — •ANNA BIRK HELLENES
MA 14.1	Tue	9:35–10:20	HSZ/0002	<b>Femtophonomagnetism</b> — •SANGEETA SHARMA, JOHN DEWHURST
MA 14.2	Tue	10:20–10:50	HSZ/0002	<b>THz-driven dynamical ferroicity in paraelectric and diamagnetic perovskites</b> — •MARTINA BASINI
MA 14.3	Tue	10:50–11:20	HSZ/0002	<b>Angular momentum transfer and chiral phonons from first principles</b> — •MARKUS WEISSENHOFER, PHILIPP RIEGER, MS MRUDUL, LUCA MIKADZE, SERGIY MANKOVSKY, SVITLANA POLESYA, HUBERT EBERT, ULRICH NOWAK, PETER M. OPPENEER
MA 14.4	Tue	11:35–12:05	HSZ/0002	<b>Inertial Spin Dynamics: A Signature of Non-Markovian Interactions in Ferromagnets</b> — •VIVEK UNIKANDANUNNI, FELIX HARTMANN, MATIAS BARGHEER, ERIC FULLERTON, STEFANO BONETTI, JANET ANDERS
MA 14.5	Tue	12:05–12:35	HSZ/0002	<b>Atomistic simulations of ultrafast spin-lattice dynamics</b> — •RICHARD EVANS, MARA STRUNGARU
MA 18.1	Tue	9:30–10:00	POT/0151	<b>Magnetic Cooling: From applications at room temperature to hydrogen liquefaction</b> — •T. GOTTSCHALL, E. BYKOV, M. STRASSHEIM, T. PLATTE, C. FUJITA, D. BENKE, M. FRIES, W. LIU, A. DÖRING, K. SKOKOV, O. GUTFLEISCH, J. WOSNITZA
MA 25.1	Wed	9:30–10:00	HSZ/0002	<b>Coherent phononic control of chirality</b> — •MICHAEL FÖRST

MA 25.2	Wed	10:00–10:30	HSZ/0002	<b>Towards a modern theory of chiralization (and can chiral phonons help us get there?)</b> — ●NICOLA SPALDIN
MA 25.5	Wed	11:15–11:45	HSZ/0002	<b>Observation and control of chiral phonons in non-centrosymmetric materials</b> — ●HIROKI UEDA
MA 27.1	Wed	9:30–10:00	HSZ/0004	<b>Towards sub-10fs magnetization switching</b> — REZA ROUZEGAR, OLIVER FRANKE, GAL LEMUT, OLIVER GUECKSTOCK, JUNWEI TONG, DIETER ENGEL, XIANMIN ZHANG, GEORG WOLTERS DORF, PIET W. BROUWER, TOBIAS KAMPFRATH, ●QUENTIN REMY
MA 29.1	Wed	9:30–10:00	POT/0112	<b>Exploring the interplay between spin and chirality</b> — ●ANGELA WITTMANN
MA 35.1	Wed	15:00–15:30	POT/0112	<b>Magneto-optic Kerr effects of higher order in magnetization in thin films of different crystal orientations</b> — ●TIMO KUSCHEL
MA 40.1	Thu	9:30–10:00	HSZ/0002	<b>Magnetic order induced chiral phonons in a ferromagnetic Weyl semimetal</b> — ●LUYI YANG
MA 40.6	Thu	11:15–11:45	HSZ/0002	<b>Thermal Hall Effects of Magnons and Phonons</b> — ●ALEXANDER MOOK
MA 43.1	Thu	9:30–10:00	POT/0112	<b>Defect-Induced Phase Transitions in the 2D Magnetic Semiconductor CrSBr</b> — ●SHENGQIANG ZHOU
MA 44.1	Thu	9:30–10:00	POT/0151	<b>2D and 3D racetracks: Interplay of geometric and magnetic chiralities</b> — ●STUART PARKIN
MA 44.2	Thu	10:00–10:30	POT/0151	<b>Combined MFM/KPFM at the Ultimate Sensitivity Limit for Probing Curvature-Engineered Micromagnetic States</b> — ●EMILY DARWIN, RESHMA PEREMADATHIL PRADEEP, LUCA BERCHIALLA, DANIEL ROTTHARDT, ALES HRABEC, HANS HUG
MA 44.3	Thu	10:30–11:00	POT/0151	<b>Curvilinear magnetism in superconducting spintronics</b> — ●SOL JACOBSEN
MA 44.4	Thu	11:15–11:45	POT/0151	<b>Advanced Control of Magnetic Nanostructures via Metasurface Engineering and Voltage-Driven Functionalities</b> — ●ANNA PALAU
MA 44.5	Thu	11:45–12:15	POT/0151	<b>Magnetic tomography of noncollinear spin textures in curvilinear geometries</b> — ●SANDRA RUIZ-GOMEZ

### Invited Talks of the joint Symposium SKM Dissertation Prize 2026 (SYSD)

See SYSD for the full program of the symposium.

SYSD 1.1	Mon	9:30–10:00	HSZ/0002	<b>Stochastic-Calculus Approach to Non-equilibrium Statistical Physics</b> — ●CAI DIEBALL
SYSD 1.2	Mon	10:00–10:30	HSZ/0002	<b>Nonuniform magnetic spin textures for sensing, storage and computing applications</b> — ●SABRI KORALTAN
SYSD 1.3	Mon	10:30–11:00	HSZ/0002	<b>Anomalous Quantum Oscillations beyond Onsager’s Fermi Surface Paradigm</b> — ●VALENTIN LEEB
SYSD 1.4	Mon	11:00–11:30	HSZ/0002	<b>Coherent Control Schemes for Semiconductor Quantum Systems</b> — ●EVA SCHÖLL
SYSD 1.5	Mon	11:30–12:00	HSZ/0002	<b>On stochastic thermodynamics under incomplete information: Thermodynamic inference from Markovian events</b> — ●JANN VAN DER MEER

### Invited Talks of the joint Symposium Fluids with Broken Time-Reversal Symmetry: Odd/Hall Viscosity between Active Matter and Electron Flows (SYBS)

See SYBS for the full program of the symposium.

SYBS 1.1	Tue	9:30–10:00	HSZ/AUDI	<b>Odd viscosity in three-dimensional fluids: flows, wakes, and eddies</b> — ●TALI KHAIN
SYBS 1.2	Tue	10:00–10:30	HSZ/AUDI	<b>Odd viscosity in two-dimensional hydrodynamic electron transport</b> — ●IGOR GORNYI, DMITRY POLYAKOV
SYBS 1.3	Tue	10:30–11:00	HSZ/AUDI	<b>Odd slip on chiral active surfaces</b> — ●ANDREJ VILFAN, YUTO HOSAKA
SYBS 1.4	Tue	11:15–11:30	HSZ/AUDI	<b>Parity-odd transport in electron fluids</b> — ●JOHANNA ERDMENGER
SYBS 1.5	Tue	11:30–11:45	HSZ/AUDI	<b>Curved Odd Elasticity</b> — LAZAROS TSALOUKIDIS, YUAN ZHOU, JACK BINYSH, NIKTA FAKHRI, CORENTIN COULAIS, ●PIOTR SURÓWKA

## Invited Talks of the joint Symposium Beyond Transistors: Material-Based Edge Computing Paradigms (SYBT)

See SYBT for the full program of the symposium.

SYBT 1.1	Wed	9:30–10:00	HSZ/AUDI	<b>Finding Neuromorphic Advantage with Magnetism — •JOHAN MENTINK</b>
SYBT 1.2	Wed	10:00–10:30	HSZ/AUDI	<b>Accelerating Neural Networks Computation with Ferroelectric Oxides — •LAURA BÉGON-LOURS, NIKHIL GARG, ALEXANDRE BAIGOL, ANWESHA PANDA, NATHAN SAVOIA, ALEXANDER FLASBY</b>
SYBT 1.3	Wed	10:30–11:00	HSZ/AUDI	<b>a photonic approach to probabilistic computing — •WOLFRAM PERNICE</b>
SYBT 1.4	Wed	11:15–11:45	HSZ/AUDI	<b>Tackling Reliability and Scalability in Neuromorphic Computing via Noise-aware Learning — •ELENI VASILAKI</b>
SYBT 1.5	Wed	11:45–12:15	HSZ/AUDI	<b>Bayesian nanodevices for trustworthy artificial intelligence — •DAMIEN QUERLIOZ</b>

## Invited Talks of the joint Symposium Interacting Degrees of Freedom in Ultrathin Quantum Films (SYQF)

See SYQF for the full program of the symposium.

SYQF 1.1	Fri	9:30–10:00	HSZ/AUDI	<b>Exciton dressing by extreme nonlinear magnons in a layered semiconductor — •GEOFFREY M. DIEDERICH</b>
SYQF 1.2	Fri	10:00–10:30	HSZ/AUDI	<b>A tale of demons and decay in two-dimensional (alter)magnets — •ALEXANDER MOOK</b>
SYQF 1.3	Fri	10:30–11:00	HSZ/AUDI	<b>Magnetism, light and matter - Role of excitons in two-dimensional magnets — •FLORIAN DIRNBERGER</b>
SYQF 1.4	Fri	11:15–11:45	HSZ/AUDI	<b>Advantages and challenges of resonance Raman scattering with infrared excitation energy — •LEONETTA BALDASSARRE</b>
SYQF 1.5	Fri	11:45–12:15	HSZ/AUDI	<b>Shining light on 2D antiferromagnets — •DMYTRO AFANASIEV</b>

## Sessions

MA 1.1–1.2	Sun	16:00–18:15	TRE/PHYS	<b>Hands-On Tutorial: Magnetic Structure Determination Using Fullprof and SARAh Representation Analysis (joint session MA/TUT)</b>
MA 2.1–2.12	Mon	9:30–12:45	HSZ/0004	<b>Altermagnets I</b>
MA 3.1–3.12	Mon	9:30–12:45	POT/0112	<b>Complex Magnetic Oxides</b>
MA 4.1–4.6	Mon	9:30–12:00	POT/0151	<b>Focus Session: Novel mechanisms of ferroic switching (joint session MA/FM)</b>
MA 5.1–5.9	Mon	9:30–12:00	POT/0351	<b>Surface Magnetism and Topological Insulators (joint session MA/TT)</b>
MA 6.1–6.12	Mon	9:30–12:45	POT/0361	<b>Magnetic Imaging Techniques I</b>
MA 7.1–7.86	Mon	9:30–12:30	P2	<b>Poster Magnetism I</b>
MA 8.1–8.13	Mon	15:00–18:30	HSZ/0002	<b>Altermagnets II</b>
MA 9.1–9.13	Mon	15:00–18:30	HSZ/0004	<b>Magnonics I</b>
MA 10.1–10.6	Mon	15:00–18:05	POT/0112	<b>INNOMAG e.V. Prizes 2026 (Diplom-/Master and Ph.D. Thesis)</b>
MA 11.1–11.11	Mon	15:00–18:00	POT/0151	<b>Electron Theory of Magnetism and Correlations (joint session MA/TT)</b>
MA 12.1–12.6	Mon	15:00–16:30	POT/0351	<b>Terahertz Spintronics</b>
MA 13.1–13.9	Mon	15:00–17:15	POT/0361	<b>Magnetic Heuslers and Semiconductors</b>
MA 14.1–14.5	Tue	9:30–12:40	HSZ/0002	<b>PhD Focus Session: What about the lattice? Lessons from (ultrafast) magnetism</b>
MA 15.1–15.7	Tue	9:30–12:45	HSZ/0003	<b>Focus Session: Quantum Sensing with Solid State Spin defects I (joint session TT/MA)</b>
MA 16.1–16.12	Tue	9:30–12:45	HSZ/0004	<b>Skymions I</b>
MA 17.1–17.11	Tue	9:30–12:30	POT/0112	<b>Multiferroics and Magnetoelectric Coupling (joint session MA/FM)</b>

MA 18.1–18.7	Tue	9:30–11:30	POT/0151	<b>Caloric Effects in Ferromagnetic Materials (joint session MA/TT)</b>
MA 19.1–19.11	Tue	9:30–12:30	POT/0361	<b>Frustrated Magnets I (joint session MA/TT)</b>
MA 20.1–20.6	Tue	14:00–15:30	HSZ/0002	<b>Altermagnets III</b>
MA 21.1–21.6	Tue	14:00–15:30	HSZ/0004	<b>Skymions II</b>
MA 22.1–22.5	Tue	14:00–15:30	BEY/0138	<b>Focus Session: Materials Discovery II – High throughput searches for functional magnetic materials (joint session FM/MA)</b>
MA 23.1–23.6	Tue	14:00–15:30	POT/0151	<b>Cooperative Phenomena: Spin Structures and Magnetic Phase Transitions (joint session MA/TT)</b>
MA 24.1–24.6	Tue	14:00–15:30	POT/0361	<b>Weyl Semimetals (joint session MA/TT)</b>
MA 25.1–25.9	Wed	9:30–12:45	HSZ/0002	<b>Focus Session: Chiral phonons and crystals coupled to magnetic order I</b>
MA 26.1–26.7	Wed	9:30–12:45	HSZ/0003	<b>Focus Session: Nickelate Superconductivity: Insights into Unconventional Pairing and Correlation Effects I (joint session TT/DS/MA)</b>
MA 27.1–27.11	Wed	9:30–12:45	HSZ/0004	<b>Ultrafast Magnetization Effects I</b>
MA 28.1–28.4	Wed	9:30–10:30	HSZ/0101	<b>Focus Session: Quantum Sensing with Solid State Spin defects II (joint session TT/HL/MA)</b>
MA 29.1–29.11	Wed	9:30–12:45	POT/0112	<b>Spin Transport and Orbitronics, Spin-Hall Effects I (joint session MA/TT)</b>
MA 30.1–30.12	Wed	9:30–12:45	POT/0151	<b>Functional Antiferromagnetism</b>
MA 31.1–31.12	Wed	9:30–12:45	POT/0361	<b>Frustrated Magnets II (joint session MA/TT)</b>
MA 32	Wed	14:00–17:30	HZDR	<b>Excursion: Current and Future High-Field THz User Facilities at HZDR</b>
MA 33.1–33.13	Wed	15:00–18:30	HSZ/0002	<b>Altermagnets IV</b>
MA 34.1–34.13	Wed	15:00–18:30	HSZ/0004	<b>Computational Magnetism I</b>
MA 35.1–35.10	Wed	15:00–18:00	POT/0112	<b>Spintronics (other effects) (joint session MA/TT)</b>
MA 36.1–36.13	Wed	15:00–18:30	POT/0151	<b>Molecular Magnetism and Magnetic Particles / Clusters I</b>
MA 37.1–37.9	Wed	15:00–17:15	POT/0351	<b>Non-Skymionic Magnetic Textures</b>
MA 38.1–38.14	Wed	15:00–18:45	POT/0361	<b>Ultrafast Magnetization Effects II</b>
MA 39.1–39.25	Wed	18:00–21:00	P2	<b>Poster Magnetism II</b>
MA 40.1–40.10	Thu	9:30–12:45	HSZ/0002	<b>Focus Session: Chiral phonons and crystals coupled to magnetic order II</b>
MA 41.1–41.11	Thu	9:30–12:30	HSZ/0003	<b>Focus Session: Nickelate Superconductivity: Insights into Unconventional Pairing and Correlation Effects II (joint session TT/DS/MA)</b>
MA 42.1–42.11	Thu	9:30–12:30	HSZ/0004	<b>Molecular Magnetism and Magnetic Particles / Clusters II</b>
MA 43.1–43.6	Thu	9:30–11:15	POT/0112	<b>Spin-Dependent Phenomena in 2D</b>
MA 44.1–44.8	Thu	9:30–13:00	POT/0151	<b>Focus Session: Curvilinear magnetism: Magnetics with nanoscale curved geometries (joint session MA/TT)</b>
MA 45.1–45.6	Thu	9:30–11:00	POT/0351	<b>Magnetic Relaxation and Gilbert Damping</b>
MA 46.1–46.5	Thu	9:30–10:45	POT/0361	<b>Magnetic Imaging Techniques II</b>
MA 47.1–47.11	Thu	15:00–18:00	HSZ/0002	<b>Altermagnets V</b>
MA 48.1–48.11	Thu	15:00–18:00	HSZ/0004	<b>Magnonics II</b>
MA 49.1–49.9	Thu	15:00–17:15	POT/0112	<b>Magnetic Imaging, Information Technology, and Sensors</b>
MA 50.1–50.9	Thu	15:00–17:15	POT/0151	<b>Bulk Materials: Soft and Hard Permanent Magnets</b>
MA 51.1–51.8	Thu	15:00–17:00	POT/0361	<b>Spin Transport and Orbitronics, Spin-Hall Effects II (joint session MA/TT)</b>
MA 52.1–52.40	Thu	15:00–17:00	P4	<b>Poster Magnetism III</b>
MA 53	Thu	18:00–19:00	HSZ/0002	<b>Members' Assembly</b>
MA 54.1–54.11	Fri	9:30–12:30	HSZ/0002	<b>Altermagnets VI</b>
MA 55.1–55.12	Fri	9:30–12:45	HSZ/0004	<b>Skymions III</b>
MA 56.1–56.6	Fri	9:30–11:30	BEY/0E40	<b>Focus Session: (Anti)ferroic states – Magnetic and magnetoelectric III (joint session FM/MA)</b>
MA 57.1–57.6	Fri	9:30–11:00	POT/0112	<b>Thin Films: Magnetic Coupling Phenomena / Exchange Bias and Magnetic Anisotropy</b>
MA 58.1–58.12	Fri	9:30–12:45	POT/0151	<b>Computational Magnetism II</b>
MA 59.1–59.11	Fri	9:30–12:30	POT/0361	<b>Magnonics III</b>

## Members' Assembly of the Magnetism Division

Thursday 18:00–19:00 HSZ/0002

- Bericht
- Wahl
- Verschiedenes