

Metal and Material Physics Division Fachverband Metall- und Materialphysik (MM)

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Overview of Invited Talks and Sessions

(Lecture halls C 130, C 230, C 243, and C 264; Poster F)

Invited Talks

MM 2.1	Mon	9:30–10:00	C 130	Defect phases and their line defects in fcc metal grain boundaries — •TOBIAS BRINK
MM 9.1	Mon	15:00–15:30	C 130	Materials Informatics - appreciation of data and algorithms — •MARKUS STRICKER
MM 30.1	Wed	9:30–10:00	C 130	Scratching the surface: understanding plasticity associated with microscale asperity contacts — •ANNA KAREER
MM 39.1	Wed	15:00–15:30	C 130	Exploring Creep-Induced Planar Faults: Segregation Dynamics and Defect Phase Transformations in High Performance Alloys — •YOLITA EGGELER
MM 49.1	Thu	9:30–10:00	C 130	STZ-vortex unit, a step forward in understanding and controlling shear banding in metallic glasses — •DANIEL SOPU
MM 58.1	Thu	15:00–15:30	C 130	Liquid-Driven Nanoporous Solids — •PATRICK HUBER

Invited Talks of the joint Symposium SKM Dissertation Prize 2024 (SYSD)

See SYSD for the full program of the symposium.

SYSD 1.1	Mon	9:30–10:00	H 1012	Nonequilibrium dynamics in constrained quantum many-body systems — •JOHANNES FELDMEIERS
SYSD 1.2	Mon	10:00–10:30	H 1012	Controlled Manipulation of Magnetic Skyrmions: Generation, Motion and Dynamics — •LISA-MARIE KERN
SYSD 1.3	Mon	10:30–11:00	H 1012	Interactions within and between cytoskeletal filaments — •CHARLOTTA LORENZ
SYSD 1.4	Mon	11:00–11:30	H 1012	Field theories in nonequilibrium statistical mechanics: from molecules to galaxies — •MICHAEL TE VRUGT
SYSD 1.5	Mon	11:30–12:00	H 1012	Lightwave control of electrons in graphene — •TOBIAS WEITZ

Invited Talks of the joint Symposium Synergistic Imaging Techniques: From Spins and Atoms to Ferroic Domains (SYSA)

See SYSA for the full program of the symposium.

SYSA 1.1	Mon	15:00–15:30	H 0105	Imaging with coherent soft X-rays — •BASTIAN PFAU
SYSA 1.2	Mon	15:30–16:00	H 0105	Exploring ferroelectric domains and domain wall dynamics with quantitative STEM — •MARTA D. ROSSELL
SYSA 1.3	Mon	16:00–16:30	H 0105	Scanning Oscillator Piezoresponse Microscopy: new tools to explore domain wall dynamics — •NEUS DOMINGO, SHIVA RAGHURAMAN, RALPH BULANADI, PATRYCJA PARUCH, STEPHEN JESSE

SYSA 1.4	Mon	16:45–17:15	H 0105	Imaging probe nuclei environments using perturbed angular correlation spectroscopy: Examples from multiferroic BiFeO₃ — ●DORU C. LUPASCU, THIEN THANH DANG, GEORG MARSCHICK, MARIANELA ESCOBAR, ASTITA DUBEY, IAN YAP CHANG JIE, JULIANA HEINIGER-SCHELL
SYSA 1.5	Mon	17:15–17:45	H 0105	Exploring antiferromagnetic order at the nanoscale with a single spin microscope — ●VINCENT JACQUES, AURORE FINCO

Sessions

MM 1.1–1.1	Sun	16:00–18:30	H 0104	Hands-on Tutorial: Creating and Running Automated Workflows for Material Science Simulations (joint session MM/TUT)
MM 2.1–2.1	Mon	9:30–10:00	C 130	Invited talk: Tobias Brink
MM 3.1–3.9	Mon	10:15–13:00	C 130	Topical Session: Sustainable metallurgy
MM 4.1–4.10	Mon	10:15–13:00	C 243	Data Driven Material Science: Big Data and Workflows I
MM 5.1–5.5	Mon	10:15–11:30	C 264	Materials for Storage and Conversion of Energy I
MM 6.1–6.5	Mon	10:15–11:30	C 230	Interface Controlled Properties, Nanomaterials and Microstructure Design I
MM 7.1–7.5	Mon	11:45–13:00	C 264	Materials for Storage and Conversion of Energy II (joint session MM/KFM)
MM 8.1–8.5	Mon	11:45–13:00	C 230	Interface Controlled Properties, Nanomaterials and Microstructure Design II
MM 9.1–9.1	Mon	15:00–15:30	C 130	Invited Talk: Markus Stricker
MM 10.1–10.8	Mon	15:45–18:00	C 130	Topical Session: Hydrogen in Materials: from Storage to Embrittlement I
MM 11.1–11.8	Mon	15:45–18:00	C 243	Data Driven Material Science: Big Data and Workflows II
MM 12.1–12.4	Mon	15:45–16:45	C 264	Materials for Storage and Conversion of Energy III
MM 13.1–13.4	Mon	15:45–16:45	C 230	Phase Transformations I
MM 14.1–14.5	Mon	16:45–18:00	C 264	Materials for Storage and Conversion of Energy IV
MM 15.1–15.5	Mon	16:45–18:00	C 230	Phase Transformations II
MM 16.1–16.18	Mon	18:30–20:30	Poster E	Poster Ia
MM 17.1–17.21	Mon	18:30–20:30	Poster F	Poster Ib
MM 18.1–18.1	Tue	9:30–10:00	C 130	Topical Talk: Dierk Raabe
MM 19.1–19.4	Tue	10:15–11:30	C 130	Topical Session: Hydrogen in Materials: from Storage to Embrittlement II
MM 20.1–20.10	Tue	10:15–13:00	C 243	Data Driven Material Science: Big Data and Workflows III
MM 21.1–21.5	Tue	10:15–11:30	C 264	Transport in Materials: Diffusion, Conduction of Charge or Heat I
MM 22.1–22.5	Tue	10:15–11:30	C 230	Interface Controlled Properties, Nanomaterials and Microstructure Design III
MM 23.1–23.5	Tue	11:45–13:15	C 130	Topical Session: Hydrogen in Materials: from Storage to Embrittlement III
MM 24.1–24.6	Tue	11:45–13:15	C 264	Transport in Materials: Diffusion, Conduction of Charge or Heat II
MM 25.1–25.5	Tue	11:45–13:00	C 230	Interface Controlled Properties, Nanomaterials and Microstructure Design IV
MM 26.1–26.3	Tue	14:00–14:45	C 130	Topical Session: Hydrogen in Materials: from Storage to Embrittlement IV
MM 27.1–27.3	Tue	14:00–14:45	C 243	Data Driven Material Science: Big Data and Workflows IV
MM 28.1–28.2	Tue	14:00–14:30	C 230	Mechanical Properties and Alloy Design: e.g. Light-Weight, High-Temperature, Multicomponent Materials I
MM 29.1–29.38	Tue	17:00–19:00	Poster B	Poster II
MM 30.1–30.1	Wed	9:30–10:00	C 130	Invited Talk: Anna Kareer
MM 31.1–31.4	Wed	10:15–11:30	C 130	Topical Session: Hydrogen in Materials: from Storage to Embrittlement V
MM 32.1–32.5	Wed	10:15–11:30	C 243	Development of Calculation Methods I
MM 33.1–33.5	Wed	10:15–11:30	C 264	Transport in Materials: Diffusion, Conduction of Charge or Heat III
MM 34.1–34.5	Wed	10:15–11:30	C 230	Mechanical Properties and Alloy Design: e.g. Light-Weight, High-Temperature, Multicomponent Materials II

MM 35.1–35.4	Wed	11:45–13:00	C 130	Topical Session: Hydrogen in Materials: from Storage to Embrittlement VI
MM 36.1–36.5	Wed	11:45–13:00	C 243	Liquid and Amorphous Materials I
MM 37.1–37.4	Wed	11:45–12:45	C 264	Transport in Materials: Diffusion, Conduction of Charge or Heat IV
MM 38.1–38.5	Wed	11:45–13:00	C 230	Mechanical Properties and Alloy Design: e.g. Light-Weight, High-Temperature, Multicomponent Materials III (joint session MM/KFM)
MM 39.1–39.1	Wed	15:00–15:30	C 130	Invited Talk: Yolita Eggeler
MM 40.1–40.11	Wed	15:00–19:05	EMH 225	Focus Session: Battery Materials – Experimental Characterisation and Safety Testing (joint session KFM/MM)
MM 41.1–41.6	Wed	15:00–17:00	A 053	Focus Session: 2D Transition Metal Carbides, Nitrides and Carbonitrides I (joint session DS/MM/O)
MM 42.1–42.8	Wed	15:30–18:00	C 130	Topical Session: In Situ and Multimodal Microscopy in Materials Physics I (joint session MM/KFM)
MM 43.1–43.8	Wed	15:45–18:00	C 243	Data Driven Material Science: Big Data and Workflows V
MM 44.1–44.8	Wed	15:45–18:00	C 264	Development of Calculation Methods II
MM 45.1–45.5	Wed	15:45–17:00	C 230	Mechanical Properties and Alloy Design: e.g. Light-Weight, High-Temperature, Multicomponent Materials IV
MM 46.1–46.3	Wed	17:15–18:00	C 230	Structurally and Chemically Complex Alloys (joint session MM/KFM)
MM 47.1–47.31	Wed	17:00–19:00	Poster B	Poster DS (joint session DS/MM/O)
MM 48	Wed	18:30–21:00	H 0110	Members' Assembly
MM 49.1–49.1	Thu	9:30–10:00	C 130	Invited Talk: Daniel Söpu
MM 50.1–50.11	Thu	9:30–13:35	EMH 225	Focus Session: Battery Materials – Ion Transport, Impurity Effects and Modelling (joint session KFM/MM)
MM 51.1–51.8	Thu	9:30–12:15	A 053	Focus Session: 2D Transition Metal Carbides, Nitrides and Carbonitrides II (joint session DS/MM/O)
MM 52.1–52.7	Thu	10:15–12:45	C 130	Topical Session: In Situ and Multimodal Microscopy in Materials Physics II
MM 53.1–53.10	Thu	10:15–13:00	C 243	Data Driven Material Science: Big Data and Workflows VI
MM 54.1–54.5	Thu	10:15–11:30	C 264	Materials for Storage and Conversion of Energy V
MM 55.1–55.6	Thu	10:15–11:45	C 230	Liquid and Amorphous Materials II
MM 56.1–56.5	Thu	11:45–13:00	C 264	Materials for Storage and Conversion of Energy VI (joint session MM/KFM)
MM 57.1–57.5	Thu	11:45–13:00	C 230	Phase Transformations III
MM 58.1–58.1	Thu	15:00–15:30	C 130	Invited Talk: Patric Huber
MM 59.1–59.7	Thu	15:00–17:30	A 053	Focus Session: 2D Transition Metal Carbides, Nitrides and Carbonitrides III (joint session DS/MM/O)
MM 60.1–60.8	Thu	15:45–18:00	C 130	Topical Session: In Situ and Multimodal Microscopy in Materials Physics III
MM 61.1–61.5	Thu	15:30–16:45	C 243	Liquid and Amorphous Materials III
MM 62.1–62.9	Thu	15:45–18:00	C 264	Development of Calculation Methods III
MM 63.1–63.5	Thu	15:30–16:45	C 230	Functional Materials: Performance, Reliability and Degradation
MM 64.1–64.5	Thu	16:45–18:00	C 243	Liquid and Amorphous Materials IV
MM 65.1–65.5	Thu	16:45–18:00	C 230	Additive Manufacturing: Microstructure Development

Members' Assembly of the Metal and Material Physics Division

Wednesday 18:45–20:45 H 0110