

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

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Overview of Invited Talks and Sessions

(Lecture rooms: H 0106, H 0107, TC 006, and TC 010; Posters: E)

Invited Talks

MM 2.1	Mon	9:30–10:00	TC 006	Atomistic Mechanisms of Hydrogen Embrittlement — •WILLIAM ARTHUR CURTIN
MM 12.1	Mon	15:00–15:30	TC 006	Insights into phase transformations and microstructure development of TiAl alloys by use of advanced characterisation techniques — •FLORIAN PYCZAK
MM 18.1	Tue	9:30–10:00	TC 006	Unraveling the Mechanisms of Plasticity in Nanostructured Materials using Advanced Data Analysis and Simulation Methods — •ALEXANDER STUKOWSKI
MM 29.1	Wed	9:30–10:00	TC 006	The role of geometric boundaries on shape changes in biology — •JOHN DUNLOP
MM 38.1	Wed	15:00–15:30	TC 006	Spatiotemporal deformation dynamics in metals — •ROBERT MAASS
MM 43.1	Wed	18:30–19:00	TC 006	Structural vs Chemical Adsorption Transitions at Surfaces & Interfaces — •WAYNE KAPLAN
MM 44.1	Wed	19:00–19:30	TC 006	Modelling solid-solid phase transformations: Atomistic insight on mechanisms and interface properties — •JUTTA ROGAL
MM 47.1	Thu	9:30–10:00	TC 006	Small experiments but great insights * Plasticity in brittle materials — •SANDRA KORTE-KERZEL, HARSHAL MATHUR, SEBASTIAN SCHRÖDERS

Invited talks of the joint symposium SYMM

See SYMM for the full program of the symposium.

SYMM 1.1	Thu	9:30–10:15	H 0105	From MAX to MXene - From 3D to 2D — •MICHEL BARSOUM
SYMM 1.2	Thu	10:15–10:45	H 0105	Structure evolution during low temperature growth of nanolaminate thin films — •J.M. SCHNEIDER, L. SHANG, H. BOLVARDI, Y. JIANG, A. AL GABAN, D. MUSIC, M. TO BABEN
SYMM 1.3	Thu	11:00–11:30	H 0105	Autonomous healing of crack damage in MAX phase ceramics — •WILLEM G. SLOOF
SYMM 1.4	Thu	11:30–12:00	H 0105	Magnetic MAX phases from first principles and thin film synthesis — •JOHANNA ROSEN
SYMM 1.5	Thu	12:00–12:30	H 0105	Weak Field Magneto-Transport Properties of Mn+1AXn Phases — •THIERRY OUISSE, LU SHI, BENOIT HACKENS, BENJAMIN PIOT, DIDIER CHAUSSENDE

Invited talks of the joint symposium SYME

See SYME for the full program of the symposium.

SYME 1.1	Fri	9:30–10:00	H 0105	Excitations and charge transfer phenomena in C based systems — •ELISA MOLINARI
SYME 1.2	Fri	10:00–10:30	H 0105	Towards optimal correlation factors for many-electron perturbation theories — •ANDREAS GRÜNEIS

SYME 1.3	Fri	10:30–11:00	H 0105	Towards an ab-initio description of high temperature superconductivity — ●GARNET CHAN
SYME 1.4	Fri	11:15–11:45	H 0105	Correlation effects in unconventional superconductors: from micro- to nano- and macroscales. — ●ROSER VALENTI
SYME 1.5	Fri	11:45–12:15	H 0105	Stochastic density functional and GW theories scaling linearly with system size — ●ROI BAER, DANIEL NEUHAUSER, ERAN RABANI

Sessions

MM 1.1–1.3	Sun	16:00–18:25	H 1058	Tutorial: Electro Chemistry 4 Condensed Matter Physicists
MM 2.1–2.1	Mon	9:30–10:00	TC 006	Invited talk Curtin
MM 3.1–3.5	Mon	10:15–11:45	H 0106	Microstructure and Phase Transformations
MM 4.1–4.5	Mon	10:15–11:45	H 0107	Liquid and Amorphous Metals I: Fragility and Dynamics of Metallic Glasses
MM 5.1–5.4	Mon	10:15–11:45	TC 006	Hydrogen in Metals: Ab initio approaches
MM 6.1–6.5	Mon	10:15–11:45	TC 010	Functional Materials I: Battery Materials
MM 7.1–7.5	Mon	11:45–13:00	H 0106	Microstructure and Phase Transformations II
MM 8.1–8.5	Mon	11:45–13:00	H 0107	Liquid and Amorphous Metals II: Structure Formation in Metallic Glasses
MM 9.1–9.5	Mon	11:45–13:15	TC 006	Hydrogen in metals II: Multiscale simulations
MM 10.1–10.5	Mon	11:45–13:00	TC 010	Functional materials II: Battery Materials
MM 11.1–11.10	Mon	14:30–17:15	EB 202	Biomaterials and Biopolymers I (joint BP/CPP)
MM 12.1–12.1	Mon	15:00–15:30	TC 006	Invited talk Pyczak
MM 13.1–13.4	Mon	15:45–16:45	H 0106	Microstructure and Phase Transformations III
MM 14.1–14.7	Mon	15:45–17:45	H 0107	Transport I: Diffusion
MM 15.1–15.7	Mon	15:45–18:00	TC 006	Hydrogen in metals III: Experiments
MM 16.1–16.7	Mon	15:45–17:45	TC 010	Functional materials III: Sensors and Actuators
MM 17.1–17.34	Mon	18:00–20:00	Poster E	Postersession I
MM 18.1–18.1	Tue	9:30–10:00	TC 006	Invited talk Stukowski
MM 19.1–19.5	Tue	10:15–11:45	H 0106	Methods in Computational Materials Modelling I: Materials Design
MM 20.1–20.5	Tue	10:15–11:30	H 0107	Liquid and Amorphous Metals III: Deformation of Metallic Glasses
MM 21.1–21.4	Tue	10:15–11:45	TC 006	Hydrogen in metals IV: Special topics
MM 22.1–22.5	Tue	10:15–11:45	TC 010	Functional Materials IV: Thermoelectric and Multiferroic Materials
MM 23.1–23.4	Tue	11:45–12:45	H 0106	Methods in Computational Materials Modelling: Battery Materials
MM 24.1–24.4	Tue	11:45–12:45	H 0107	Transport II: Thermal and Electrical Conductivity
MM 25.1–25.5	Tue	11:45–13:15	TC 006	Hydrogen in Metals V: H in Steels
MM 26.1–26.5	Tue	11:45–13:00	TC 010	Functional Materials V: Functional Materials
MM 27.1–27.7	Tue	14:00–15:45	A 053	Transport: Nanomechanics (joint session with MM)
MM 28.1–28.35	Tue	18:30–20:30	Poster E	Poster Session II
MM 29.1–29.1	Wed	9:30–10:00	TC 006	Invited talk Dunlop
MM 30.1–30.5	Wed	10:15–11:45	H 0106	Methods in Computational Materials Modelling III: Thermodynamics
MM 31.1–31.5	Wed	10:15–11:30	H 0107	Liquid and Amorphous Metals IV: Structure and Electronic Properties of Glasses
MM 32.1–32.3	Wed	10:15–11:45	TC 006	Biomaterials and Biological materials I
MM 33.1–33.4	Wed	10:15–11:30	TC 010	Structural Materials I: Phase Stability and Mechanical Properties
MM 34.1–34.3	Wed	11:30–12:15	TC 010	Structural Materials II: Brazing and Welding
MM 35.1–35.6	Wed	11:45–13:15	H 0106	Methods in Computational Materials Modelling IV: Steels
MM 36.1–36.4	Wed	11:45–12:45	H 0107	Nanomaterials I: Excess Volume and Confinement
MM 37.1–37.5	Wed	11:45–13:15	TC 006	Biomaterials and Biological Materials II
MM 38.1–38.1	Wed	15:00–15:30	TC 006	Invited talk Maass
MM 39.1–39.7	Wed	15:45–17:45	H 0106	Methods in Computational Materials Modelling V: Kinetics and Beyond DFT
MM 40.1–40.8	Wed	15:45–18:00	H 0107	Nanomaterials II: Mechanical Properties
MM 41.1–41.6	Wed	15:45–17:15	TC 006	Electron Microscopy

MM 42.1–42.8	Wed	15:45–18:00	TC 010	Mechanical Properties I
MM 43.1–43.1	Wed	18:30–19:00	TC 006	Invited talk Kaplan
MM 44.1–44.1	Wed	19:00–19:30	TC 006	Invited talk Rogal
MM 45	Wed	20:00–21:00	TC 006	General Meeting of the Metal- and Materials Physics Division and Presentation of the Best Poster Award
MM 46.1–46.8	Thu	9:30–13:00	EB 407	Focused Session on GHz Dielectrics: Materials for Mobile Communication I (jointly with HL, MM, DY)
MM 47.1–47.1	Thu	9:30–10:00	TC 006	Invited talk Korte
MM 48.1–48.5	Thu	10:15–11:30	H 0106	Methods in Computational Materials Modelling VI: Algorithms
MM 49.1–49.5	Thu	10:15–11:45	H 0107	Interfaces I: Structure and Segregation
MM 50.1–50.3	Thu	10:15–11:45	TC 006	Biomaterials and Biological Materials III
MM 51.1–51.5	Thu	10:15–11:45	TC 010	Mechanical properties II
MM 52.1–52.6	Thu	11:45–13:15	H 0106	Nanomaterials III: Nanoporous Gold and Phase Transformations
MM 53.1–53.3	Thu	11:45–12:30	H 0107	Interfaces II: Deformation and Motion
MM 54.1–54.5	Thu	11:45–13:00	TC 006	Biomaterials and Biological Materials IV
MM 55.1–55.4	Thu	11:45–12:45	TC 010	Mechanical Properties III
MM 56.1–56.5	Thu	15:00–17:00	EB 407	Focused Session on GHz Dielectrics: Materials for Mobile Communication II (jointly with HL, MM, DY)
MM 57.1–57.5	Fri	9:30–12:15	H 0105	Frontiers of Electronic Structure Theory: Many-body Effects on the Nano-scale

Annual General Meeting of the Metal and Material Physics Division and Best Poster Award

Mittwoch 20:00–21:00 TC 006

- Bericht
- Wahl
- Verschiedenes