PROGRAMME OVERVIEW

TU Wien, Freihaus building, Vienna, Austria

Monday, July 13, 2026

13:00-13:35	Opening ceremony (including concert)
13:35-14:00	Inaugural lecture (IL1) Peter Fischer
14:00-14:40	Keynote 1 (K1) Stuart Parkin
14:40-15:10	Coffee break
15:10-15:40	Invited 1 (I1) Sam Ladak
15:40-16:00	Oral 1 (O1) Naëmi Leo
16:00-16:30	Invited 2 (I2) Victoria Vega Fernández (student)
16:30-16:50	Oral 2 (O2) Bethanie Stadler
16:50-17:10	Oral 3 (O3) Rafael Pérez
17:10-18:00	Lab tours

Tuesday, July 14, 2026

09:00-09:40	Keynote 2 (K2) Shunsuke Fukami
09:40-10:10	Invited 3 (I3) Vincent Cros
10:10-10:30	Oral 4 (O4) Krishnanjana Puzhekadavil Joy (student)
10:30-11:00	Coffee break
11:00-11:05	Sponsor 1: Zurich Instruments
11:05-11:35	Invited 4 (I4) Kai Liu
11:35-11:55	Oral 5 (O5) Juliano Denardin
11:55-12:25	Invited 5 (I5) Tristan da Câmara Santa Clara Gomes
12:30-14:00	Lunch
14:00-15:30	Poster Session 1 - coffee served
15:30-15:50	Oral 6 (O6) Eider Berganza
15:50-16:20	Invited 6 (I6) Lucía Gómez Cruz (student)
16:20-16:40	Oral 7 (O7) Daria Gusakova
16:40-17:00	Oral 8 (O8) Robert Kraft (student)
17:10-18:00	Lab tours

Wednesday, July 15, 2026

09:00-09:40	Keynote 3 (K3) Denis Sheka
09:40-10:10	Invited 7 (I7) Sabri Koraltan
10:10-10:30	Oral 9 (O9) Trevor Almeida
10:30-11:00	Coffee break
11:00-11:05	Sponsor 2 : Park Systems
11:05-11:25	Oral 10 (O10) Olha Bezsmertna (student)
11:25-11:55	Invited 8 (I8) Sol Jacobsen
11:55-12:15	Oral 11 (O11) Alexander Edström
12:30-14:00	Lunch
14:00-15:30	Poster Session 2 - coffee served
15:30-16:00	Invited 9 (I9) Run-Wei Li
16:00-16:20	Oral 12 (O12) Giovanni Finocchio
16:20-16:50	Invited 10 (I10) Ivan Smalyuk
17:00-17:20	Conference photo

Thursday, July 16, 2026

09:00-09:40	Keynote 4 (K4) Claire Donnelly
09:40-10:10	Invited 11 (I11) Charudatta Phatak
10:10-10:30	Oral 13 (O13) Nicolas Jaouen
10:30-11:00	Coffee break
11:00-11:05	Sponsor 3: Durham Magneto-Optics
11:05-11:35	Invited 12 (I12) Saroj Dash
11:35-11:55	Oral 14 (O14) Dominik Schramm (student)
11:55-12:15	Oral 15 (O15) Mateusz Gołębiewski
12:30-14:00	Lunch
14:00-14:40	Keynote 5 (K5) Dirk Grundler
14:40-15:10	Invited 13 (I13) Claas Abert
15:10-15:30	Oral 16 (O16) Gianluca Gubbiotti
15:30-16:00	Coffee break
16:00-16:30	Invited 14 (I14) Massimiliano d'Aquino
16:30-16:50	Oral 17 (O17) Matteo Vitali (student)
17:00-18:30	Social activity
18:30-22:00	Conference dinner

Friday, July 17, 2026

09:30-10:00	Invited 15 (I15) Max Birch
10:00-10:20	Oral 18 (O18) Rikako Yamamoto
10:20-10:40	Oral 19 (O20) Volodymyr Kravchuk
10:40-11:10	Coffee break
11:10-11:40	Invited 16 (I16) Karin Everschor-Sitte
11:40-12:00	Oral 20 (O19) Sanjay Ashok
12:00-12:20	Oral 21 (O21) Richard Harrison
12:30-13:00	Closing ceremony

Monday, July 13, 2026
Detailed scientific programme
TU Wien, Freihaus building

Session 01
Chair: Amalio Fernández-Pacheco *Technische Universität Wien (TU Wien)*

13:00-13:35
Opening ceremony (including concert)

13:35-14:00
IL1. Advances in 3D nanomagnetism: key breakthroughs, open challenges, and future opportunities
Peter Fischer
Lawrence Berkeley National Laboratory

14:00-14:40
K1. 2D and 3D Racetrack Memory
Stuart Parkin
Max Planck Institute of Microstructure Physics, Halle

14:40-15:10
Coffee break

Session 02
Chair: Olivier Fruchart *SPINTEC, Spintronics and Technology of Components*

15:10-15:40
I1. 3D Artificial Spin-ice
Sam Ladak
Cardiff University

15:40-16:00
O1. Deterministic control of internal structure of Bloch points using topological defects in helical nanowires
Naëmi Leo
Loughborough University

16:00-16:30
I2. Branch selection at stripe domain bifurcations in reconfigurable magnetic domain wall racetracks
Victoria Vega Fernández (student)
University of Oviedo

16:30-16:50
O2. Controlling and Observing Vortex Formation in Magnetic Nanowire: Individual Nanowires and Arrays
Bethanie Stadler
University of Minnesota

16:50-17:10

O3. Thermal Gradient-Induced Bouncing of Chiral Domain Walls under Applied Current at Cylindrical Nanowire Ends

Rafael Pérez
Institute of Materials Science of Madrid

17:10-18:00

Lab tours

Tuesday, July 14, 2026
Detailed scientific programme
TU Wien, Freihaus building

Session 03
Chair: Dieter Suess *University of Vienna*

09:00-09:40
K2. MRAM and probabilistic spintronics towards three-dimensional magnetic architectures
Shunsuke Fukami
Tohoku University

09:40-10:10
I3. Pt/Co/Al multilayers: a material platform for 3D skyrmionics
Vincent Cros
Laboratoire Albert Fert, CNRS, Thales, Université Paris-Saclay

10:10-10:30
O4. Three-dimensional control of magnetic cocoons in multilayers employing He+ ions
Krishnanjana Puzhekadavil Joy (student)
Helmholtz Zentrum Berlin, University of Augsburg

10:30-11:00
Coffee break

Session 04
Chair: Bethanie Stadler *University of Minnesota*

11:00-11:05
Sponsor 1: Zurich Instruments

11:05-11:35
I4. 3D magnetic nanowire networks and curvature induced magnetism
Kai Liu
Georgetown University

11:35-11:55
O5. Geometry-stabilized skyrmions and emergent Hall signatures in curved Pt/Co/Ta nanodomes
Juliano Denardin
Physics Department, University of Santiago

11:55-12:25
I5. Magneto-thermoelectric effects in three-dimensional interconnected magnetic nanowire networks
Tristan da Câmara Santa Clara Gomes
INESC Microsistemas e Nanotecnologias (INESC MN)

12:30-14:00
Lunch

Poster Session 1
TU Wien, Freihaus building

14:00-15:30

P1. Focused electron beam induced deposition and characterization of 3D racetrack memory systems
Trevor Almeida
University of Glasgow

P2. Bias-engineered synthetic antiferromagnets hosting sub-20 nm zero-field skyrmions at room temperature
Riccardo Tomasello
Politecnico di Bari

P3. High-resolution two-photon lithography for 3D printing nanomagnets
Joseph Askey
Cardiff University

P4. Conformally coated three-dimensional magnetic nanostructured metamaterials
Alex Roberts (student)
Cardiff University

P5. Domain wall motion in 3D nano-printed iron nanowires
Jakub Jurczyk
Institute of Applied Physics, TU Wien

P6. Atomic Layer Deposition for 3D Nanomagnetic Architectures
Haojie Zhang
Max Planck Institute of Microstructure Physics, Halle, Germany

P7. Exchange bias in bulk nanocomposites
Andrea Bachmaier
Erich Schmid Institute of Materials Science, Austrian Academy of Sciences

P8. 3D heat flux sensor based on anomalous Nernst effect
Kenji Tanabe
Toyota Technological Institute

P9. Role of quadratic and biquadratic coupling in the spin-wave modes of CoFe/Ru/NiFe Artificial Spin Ice structures
Riccardo Fornari (student)
University of Perugia

P10. Skyrmionic cocoons imaged in 3D using HERALDO reconstructions
Jhon Chiliquinga (student)
Laboratoire Albert Fert, CNRS, Thales, Université Paris-Saclay

P11. Mapping the configuration of thick permanent magnets with pre-edge hard X-ray magnetic tomography
Ginevra Lautizi
Physics of Quantum materials, Max Planck Institute for Chemical Physics of Solids

P12. GHz noise characterization and magnetization reconstruction in a scanning magnetometer: A comparative study using scanning NV and MOKE
Miha Pompe
QZabre AG

P13. Correlative afm-sem-mfm for nanoscale magnetic domain characterization
Marion Wolff (student)
Quantum Design Microscopy GmbH

P14. Comparative studies of magnetic configurations in modulated nanowires
Agustina Asenjo
Instituto de Ciencia de Materiales de Madrid, CSIC

P15. Resonant domain wall dynamics in a three-dimensional magnetic double helix
Imelda Pamela Morales Fernandez (student)
Max Planck Institute for Chemical Physics of Solids

P16. Domain Wall Dynamics in Three-Dimensional Chiral Magnetic Nanostructures
Douveas Iason-Konstantinos (student)
University of Vienna

P17. Controlling Domain Wall Dynamics in Curved Cylindrical Nanowires: From Vortex-Antivortex to Bloch Point Configurations
Roberto Moreno Ortega
Instituto de Ciencia de Materiales de Madrid, CSIC, Madrid, Spain

P18. Magneto-optical Kerr microscopy on non-planar geometries
Le Zhao
Technische Universität Wien (TU Wien)

P19. Geometric effects on the magneto-optical Kerr effect investigated at 3D non-planar non-curved magnetic thin films
Christian Janzen (student)
Institute of Physics and Center for Interdisciplinary Nanostructure Science and Technology (CINSaT), University of Kassel, Kassel, Germany

P20. Coherent spin waves in 3D-printed magnonic crystals excited via a microresonator and integrated CPW
Huixin Guo
Technische Universität Wien (TU Wien)

Session 05
Chair: Naemi Leo *University of Loughborough*

15:30-15:50
O6. Curvature gradient driven domain wall automotion
Eider Berganza
Consejo Superior de Investigaciones Científicas

15:50-16:20
I6. Delayed and Non-Reciprocal Walker Breakdown in Nanowires
Lucía Gómez Cruz (student)
Dpto. Física de Materiales, Facultad de Ciencias Físicas, Universidad Complutense de Madrid

16:20-16:40
O7. Topology of domain wall transformations in magnetic cylinders: micromagnetic study and vector field analysis
Daria Gusakova
SPINTEC, Spintronics and Technology of Components

16:40-17:00

O8. jaxFMM: Fast and accurate stray field evaluation for finite-element micromagnetics

Robert Kraft (student)
Physics of Functional Materials, University of Vienna

17:10-18:00

Lab tours

Wednesday, July 15, 2026
Detailed scientific programme
TU Wien, Freihaus building

Session 06
Chair: Oksana Chubykalo-Fesenko *Instituto de Ciencia de Materiales de Madrid, CSIC*

09:00-09:40
K3. Fundamentals of curvilinear magnetism: geometry-governed effects
Denis Sheka
Taras Shevchenko National University of Kyiv

09:40-10:10
I7. Direct-observation of spin-wave modes on three-dimensional curvilinear nanocaps
Sabri Koraltan
Technische Universität Wien (TU Wien)

10:10-10:30
O9. Direct observation of Néel-type skyrmionic textures in 3D curved magnets under zero-field conditions
Trevor Almeida
University of Glasgow

10:30-11:00
Coffee break

Session 07
Chair: Karin Everschor-Sitte *Universität Duisburg-Essen*

11:00-11:05
Sponsor 2 : Park Systems

11:05-11:25
O10. Magnetic solitons in hierarchical 3D magnetic curvilinear nanoarchitectures
Olha Bezsmertna (student)
Helmholtz-Zentrum Dresden-Rossendorf

11:25-11:55
I8. Functionalizing superconductivity in curvilinear 3D magnetic nanoarchitectures
Sol Jacobsen
Norwegian University of Science and Technology (NTNU)

11:55-12:15
O11. Flexomagnetic Effects in 2D Magnets
Alexander Edström
KTH Royal Institute of Technology

12:30-14:00
Lunch

Poster Session 2
TU Wien, Freihaus building

14:00-15:30

P21. Topological nucleation mechanism of magnetically confined Vortex-Antivortex pairs in weak stripe racetracks
Aurelio Hierro Rodríguez
University of Oviedo

P22. Hopfions in Screw Chiral Magnets
Sandra Chulliparambil Shaju (student)
University of Duisburg-Essen

P23. Observation of magnetic skyrmions in permalloy-rich [Pt/Co/NiFe/Ta] multilayers formed on curvilinear surfaces via scanning transmission X-ray microscopy
Takeaki Gokita (student)
Technische Universität Wien (TU Wien)

P24. Structure and dynamics of complex chiral 3D domain walls in cylindrical geometry.
Oksana Chubykalo-Fesenko
Instituto de Ciencia de Materiales de Madrid, CSIC

P25. Thermodynamic stability and magnetoelectric response of emergent magnetic monopoles in topological magnets
Midori Yamada (student)
The University of Tokyo

P26. Strain control of three-dimensional magnetic nanostructures
José Claudio Corsaletti Filho (student)
Max Planck Institute for Chemical Physics of Solids

P27. A Hall bar on three-dimensional surface fabricated by focused ion beam
Chi Fang
Max Planck Institute of Microstructure Physics

P28. Engineering of rare-earth microwires for biomedical applications
Koplak Oksana
University of Milano-Bicocca

P29. Mapping in-plane stray field components with torsional resonance mode magnetic force microscopy
Jorge Marqués Marchán
Max Planck Institute for Chemical Physics of Solids

P30. Magnetic vector tomography of extended chiral magnets
Polly Mitchell
Max Planck Institute for Chemical Physics of Solids

P31. Physics-informed tomographic reconstruction of chiral magnetic textures
Alexander Setescak (student)
University of Vienna

P32. Geometry-modified domain wall dynamics for 3D racetrack memories
Tiange Dong (student)
Max Planck Institute of Microstructure Physics

P33. Domain-wall membranes in 3d nanomagnetism: a geometric effective theory for dynamics and spin waves
Jacob Mankenberg
Linnaeus University, Kalmar Sweden

P34. Effect of Dimensionality on the Spin Wave Properties on Mix Material Magnonic Crystals
Zhehai Chen
National University of Singapore

P35. The Quantum Spin-Polarized Low-Energy Electron Microscope: Pulsed source, low temperature and angle resolved spectroscopy
Alexander Stibor
Staff Scientist for Quantum Instrumentation, Molecular Foundry, Lawrence Berkeley National Laboratory, Berkeley

P36. Towards 3D magnonics: volumetric magnonic directional coupling in high-aspect-ratio YIG microstructures
Hanadi Mortada (student)
Fachbereich Physik and Landesforschungszentrum OPTIMAS, Rheinland-Pfälzische Technische Universität Kaiserslautern-Landau, 67663 Kaiserslautern, Germany.

P37. Dynamic behaviour of magnetic skyrmions in antidot-based DMI-free multilayer structure
Ganna Kharchenko
Central European Institute of Technology (CEITEC), Brno University of Technology, Brno, Czech Republic

P38. Impact of Spin-Diffusion Mechanisms on Magnetization Switching in 3D Perpendicular Shape-Anisotropy Pillars
Daria Gusakova
SPINTEC, Spintronics and Technology of Components

P39. Magnetisation reversal in FeGa 3D nanostructures
Irdi Murataj
Istituto Nazionale di Ricerca Metrologica

Session 08
Chair: Denys Makarov *Helmholtz-Zentrum Dresden-Rossendorf*

15:30-16:00
I9. Strain gradient: a new dimension for magnetic modulation in magnetic thin films
Run-Wei Li
Eastern Institute of Technology, Ningbo

16:00-16:20
O12. Magnetic skyrmion-based devices with novel functionalities
Giovanni Finocchio
University of Messina

16:20-16:50
I10. Dynamics of skyrmions and hopfions in colloidal chiral magnets
Ivan Smalyuk
University of Colorado

17:00-17:20
Conference photo

Thursday, July 16, 2026
Detailed scientific programme
TU Wien, Freihaus building

Session 09
Chair: Aurelio Hierro Rodríguez *University of Oviedo*

09:00-09:40
K4. Keynote lecture
Claire Donnelly
Max Planck Institute for Chemical Physics of Solids, Dresden

09:40-10:10
I11. Design and control of three dimensional magnetic fields and solitons in helical nanostructures
Charudatta Phatak
Argonne National Laboratory/Northwestern University

10:10-10:30
O13. Use of coherence at SEXTANTS beamline for 3D magnetic imaging: status and perspectives with SOLEIL II
Nicolas Jaouen
Synchrotron SOLEIL

10:30-11:00
Coffee break

Session 10
Chair: Charudatta Phatak *Argonne National Laboratory*

11:00-11:05
Sponsor 3: Durham Magneto-Optics

11:05-11:35
I12. Energy-efficient field-free spin-orbit torques in 2D magnetic heterostructures
Saroj Dash
Chalmers University of Technology

11:35-11:55
O14. Self-consistent Magnetic Force Microscope-simulator: paving the way for vector MFM
Dominik Schramm (student)
Technische Universität Wien (TU Wien)

11:55-12:15
O15. Design rules of 3D nanostructures for switchable and localized FMR modes
Mateusz Gołębiewski
Institute of Spintronics and Quantum Information, Faculty of Physics and Astronomy, Adam Mickiewicz University, Poznań, Poland

12:30-14:00
Lunch

Session 11
Chair: Riccardo Tomasello *Politecnico di Bari*

14:00-14:40
K5. 3D magnonics: spin-wave transport in three-dimensional ferromagnetic nano-networks and individual devices, Magnons
Dirk Grundler
Ecole Polytechnique Fédérale de Lausanne (EPFL)

14:40-15:10
I13. Inverse micromagnetics for accurate magnetization reconstruction and magnetic device design
Claas Abert
University of Vienna

15:10-15:30
O16. Anisotropic magnonic band structure in 3D curvilinear magnonic crystal
Gianluca Gubbiotti
Istituto Officina dei Materiali, Consiglio Nazionale delle Ricerche (CNR-IOM)

15:30-16:00
Coffee break

Session 12
Chair: Gianluca Gubbiotti *Istituto Officina dei Materiali, Consiglio Nazionale delle Ricerche (CNR-IOM), Perugia*

16:00-16:30
I14. Inertial spin-wave dynamics in twisted magnetic nanostrips
Massimiliano d'Aquino
University of Naples Federico II

16:30-16:50
O17. 3D nanoscale control of magnetism in crystalline YIG
Matteo Vitali (student)
Department of Physics - Politecnico di Milano

17:00-18:30
Social activity

18:30-22:00
Conference dinner

Friday, July 17, 2026
Detailed scientific programme
TU Wien, Freihaus building

Session 13
Chair: Peter Fischer *Lawrence Berkeley National Laboratory*

09:30-10:00
I15. Nanosculpted 3D helices of a magnetic Weyl semimetal with switchable non-reciprocal electron transport
Max Birch
RIKEN Center for Emergent Matter Science

10:00-10:20
O18. Geometrical control of topological spin textures in Heusler magnetic nanowires
Rikako Yamamoto
Max Planck Institute for Chemical Physics of Solids

10:20-10:40
O20. Curvature-induced magnetization of altermagnetic films
Volodymyr Kravchuk
Leibniz Institute for Solid State and Materials Research (IFW-Dresden)

10:40-11:10
Coffee break

Session 14
Chair: Claire Donnelly *Max Planck Institute for Chemical Physics of Solids, Dresden*

11:10-11:40
I16. Rethinking linking – Topology in magnetism, water waves and plasmonics
Karin Everschor-Sitte
University of Duisburg-Essen

11:40-12:00
O19. Fractional Hopfions and Bloch Point Pairs in Composite Magnets
Sanjay Ashok
Karlsruhe Institute of Technology

12:00-12:20
O21. Magnetic vector tomography reveals giant magnetofossils are optimised for magnetointensity reception
Richard Harrison
University of Cambridge

12:30-13:00
Closing ceremony