Presentations

Saturday, April 26th, 2025

Next Day

Sessions by Room

Room Name	Session Name	Start Time
HALL 1 - Mevlana 1	Public Outreach and Plenary Session	14:00:00

HALL 1 - Mevlana 1

Public Outreach and Plenary Session

HALL 1 - Mevlana 1	14:00	German Francisco de la Fuente & Necdet Ünüvar

Time	Title	Status	Author	Affiliation/Country
14:00-14:30 The World's Oldest Military Band, Mehteran Show				
14:30-14:35	**Welcome Address by the Conference Director**			
14:35-14:50	On Sustainable Development and the Role of Superconductivity together with Emerging Quantum Technologies	Accepted as Plenary Talk	Ali Gencer	Ankara University Türkiye
14:50-15:20	Climate Change beyond the 1.5C limit, Emerging Technologies and Climate Justice	Accepted as Plenary Talk	Geoffrey Levermore	The University of Manchester United Kingdom

Time	Title	Status	Author	Affiliation/Country
15:20-15:25	Welcome Address	Accepted as Plenary Talk	Canay Kocakuşaklı	Ankara University Türkiye
15:25-15:45	Vision and Mission of Ankara University as a Leading Research Institution	Accepted as Plenary Talk	Necdet Unuvar	Ankara University Türkiye
15:45-16:00	**Coffee Break**			
16:00-16:45	Recent progress in MgB2 and iron-based superconducting wires	Accepted as Plenary Talk	Yanwei Ma	Institute of Electrical Engineering, Chinese Academy of Sciences China
16:45-17:30	Radiation Damage of High Temperature Superconductors for Fusion Magnets	Accepted as Plenary Talk	Susie Speller	University of Oxford United Kingdom
17:30-17:45	**Coffee Break**			
17:45-18:30	The current status and future prospects of quantum computing in the world and Türkiye.	Accepted as Plenary Talk	Ali Bozbey	TOBB University of Economics and Technology Türkiye
18:30-19:15	Quantum magnonics with propagating magnons	Accepted as Plenary Talk	Andrii Chumak	Faculty of Physics, University of Vienna Austria
19:15-20:05	**Welcome Reception and Cultural Presentations**			

Presentations

Saturday, April 26th, 2025

Next Day

Presentations

Sunday, April 27th, 2025

Previous Day | Next Day

Sessions by Room

Room Name	Session Name	Start Time
HALL 1 - Mevlana 1	Plenary	09:30:00
	Half-Plenary 1	14:00:00
	Superconducting Motors and Applications in Electrical Engineering	14:45:00
HALL 2 - Mevlana 2	Half-Plenary 2	14:00:00
	Novel Quantum Magnetism in Low Dimensions	14:45:00
HALL 3 - Yunus Emre 1	Topological Quantum Physics and Materials	14:45:00
HALL 4 - Yunus Emre 2	The Studies of Electronic Instabilities in Kagome Materials Using Spectroscopic Methods	14:45:00
HALL 5 - Aristo	Device Physics of Josephson Junctions and Their Fundamental Technologies	14:45:00
HALL 6 - Eflatun	New Phenomena and Applications in Molecular Magnets	14:45:00
HALL 7 - Hipokrat	Superconductivity and Magnetism in Heavy Fermion Systems	14:45:00
HALL 8 - İbn-i Sina	Advances in Iron-based Superconductors: Growth, fundamental and applied research	14:45:00
HALL 9 - Halide Edib Adıvar	Vortex Matter, Dynamics and Pinning	14:45:00
FOYER	Poster Session	18:15:00

HALL 1 - Mevlana 1

Plenary

HALL 1 - Mevlana 1	09:30	Ali Gencer, and İbrahim Belenli

Time	Title	Status	Author	Affiliation/Country
08:30-09:15 International Awards Ceremony				
09:30-10:15	Quantum Computing with Qudits	Accepted as Plenary Talk	Irfan Siddiqi	UC Berkeley, USA USA
10:15-11:00	Emergence of Complexity from Individual Magnetic Atoms to Hybrid Magnet – Superconductor Quantum States	Accepted as Plenary Talk	Roland Wiesendanger	University of Hamburg Germany
11:00-11:15	**Coffee Break**			
11:15-12:00	Real-Time Atomic-Scale Observation of Topotactic Phase Transformation	Accepted as Plenary Talk	Woo Seok Choi	Sungkyunkwan University South Korea
12:00-12:45	Deciphering the New Magnetic State, “B-Phase”, Found in MnSi at Low Temperatures, Using SANS and μSR Techniques	Accepted as Plenary Talk	Javier Campo	Spanish National Research Council (CSIC) Spain

Half-Plenary 1

HALL 1 - Mevlana 1	14:00	Valerii Vinokur & Zahid Hasan

Time	Title	Status	Author	Affiliation/Country
14:00-14:40	Quantum materials: On the interplay of strong correlations and electronic topology	Accepted as Half-Plenary Talk	Silke Paschen	TU Wien Austria

Superconducting Motors and Applications in Electrical Engineering

HALL 1 - Mevlana 1 | **14:45** | **Co-organizers: Kévin Berger & Taketsune Nakamura**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Kévin Berger & Taketsune Nakamura				
14:45-15:15	Superconducting Motors for Aircraft Propulsion	Accepted as Keynote Talk	Kiruba Haran	University of Illinois USA
15:15-15:35	Superconducting Motors and Magnetic Bearings for Liquid Hydrogen Pump Systems in Mobility Applications	Accepted as Invited Talk	Yutaka Terao	Kyoto University Japan
15:35-15:55	Development of a Nonlinear Vector Control Method for Variable Speed Drive of a High Temperature Superconductor Induction/Synchronous Motor	Accepted as Invited Talk	Taketsune Nakamura	Kyoto University Japan
15:55-16:15	A Multiphase Superconducting Axial Machine for Applications with Demanding Flexibility and Fault-Tolerance Requirements	Accepted as Contributed Talk	Joao Murta-Pina	Centre of Technology and Systems - UNINOVA Portugal
16:15-16:30	**Coffee Break**			
Session Moderators: Kévin Berger & Taketsune Nakamura				

Time	Title	Status	Author	Affiliation/Country
16:30-17:00	Development of Liquid Hydrogen Submerged Pump with High-temperature Superconducting Motor	Accepted as Invited Talk	NAOKI MASUDA	TORISHIMA PUMP MFG. CO., LTD Japan
17:00-17:20	AC losses in HTS coils for superconducting motor application	Accepted as Invited Talk	Bruno Douine	GREEN University of Lorraine France
17:20-17:40	Statistical characterization of current transport properties in high-temperature superconducting bundle conductors for high-temperature superconducting induction synchronous motors with high rotational power	Accepted as Invited Talk	Masayoshi Inoue	Fukuoka Institute of Technology Japan

HALL 2 - Mevlana 2

Half-Plenary 2

HALL 2 - Mevlana 2	14:00	Masahiro Yamashita & Javier Campo

Time	Title	Status	Author	Affiliation/Country
14:00-14:40	Powerful Single-Molecule Magnets Containing Radicals and Bismuth	Accepted as Half-Plenary Talk	Selvan Demir	Michigan State University, Department of Chemistry USA

Novel Quantum Magnetism in Low Dimensions

HALL 2 - Mevlana 2	14:45	Co-organizers: Alexander Chernyshev & Mike Zhitomirsky

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Alexander Chernyshev & Natalia Perkins				
14:45-15:15	Pressure-induced quantum phase transition in the spin-1 chain antiferromagnet NiCl2 ·4SC(NH2)2	Accepted as Invited Talk	Sergei Zvyagin	Dresden High Magnetic Field Lab Germany
15:15-15:45	Fractional Topological Excitations in the Kagome-Lattice Heisenberg Antiferromagnet	Accepted as Invited Talk	Michael Zhitomirsky	IRIG, CEA France
15:45-16:15				
16:15-16:30	**Coffee Break**			
Session Moderators: Mike Zhitomirsky & Sergey Zvyagin				
16:30-17:00	Evidence for Anisotropic Magnetic Interaction in a-RuCl3 Deduced from Polarized Inelastic Neutron Scattering Experiments	Accepted as Invited Talk	Markus Braden	Universität zu Köln Germany
17:00-17:30	The Saga of α-RuCl3: Parameters, Models, and Phase Diagram	Accepted as Invited Talk	Alexander Chernyshev	University of California, Irvine USA

HALL 3 - Yunus Emre 1

Topological Quantum Physics and Materials

HALL 3 - Yunus Emre 1	14:45	Co-organizers: Valerii Vinokur & Mikhail Croitoru

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Valerii Vinokur & Mikhail Croitoru				
14:45-15:15	Resolving phonon-mediated superconducting pairing symmetries from first-principles calculation	Accepted as Invited Talk	Zheng Liu	Beihang University China
15:15-15:45	Exploration of emergent rich strongly correlated state in topological Kondo insulator SmB6	Accepted as Invited Talk	Satyajit Banerjee	Dept of Physics, IIT Kanpur India
15:45-16:15	Strong indications for an excitonic insulator state in Ta2(Ni,Co)(Se,S)5: A combined study of the spatial and electronic structure	Accepted as Contributed Talk	Nour Maraytta	Institute for Quantum Materials and Technologies, Karlsruhe Institute of Technology Germany
16:15-16:30	**Coffee Break**			
Session Moderators: Valerii Vinokur & Mikhail Croitoru				
16:30-17:00	Effect of Defects on Light-Induced Switching of Superconducting States via the Inverse Faraday Effect	Accepted as Invited Talk	Mihail Croitoru	HSE University, Moscow, Russia Russia
17:00-17:30	Loss control as a source of security for quantum cryptography	Accepted as Invited Talk	Aleksei Kodukhov	Terra Quantum AG Germany
17:30-18:00	Advantage distillation as a means of increasing error tolerance of loss control-based QKD	Accepted as Invited Talk	Valeria Pastushenko	Terra Quantum AG Germany

HALL 4 - Yunus Emre 2

The Studies of Electronic Instabilities in Kagome Materials Using Spectroscopic Methods

HALL 4 - Yunus Emre 2	14:45	Co-organizers: Ming Shi & Yu Song & Yang Liu

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Ming Shi & Jianlin Luo				
14:45-15:15	Peculiarities of the Electronic Structure in the Triangular Lattice Hubbard Model	Accepted as Invited Talk	Sergei Ovchinnikov	Kirensky Institute of Physics, Federal Research Center KSC SB RAS Russia
15:15-15:45	Phonon Softening and Flat Mode in the Bilayer Kagome Metal ScV6Sn6	Accepted as Invited Talk	Yu Song	Zhejiang University China
15:45-16:15	Fractionalized Charge in a Kagome Ferromagnet	Accepted as Invited Talk	Yona Soh	Paul Scherrer Institute Switzerland
16:15-16:30	**Coffee Break**			
Session Moderators: Yona Soh & Thorsten Schmitt				
16:30-17:00	Phonon promoted charge density wave in topological kagome metal ScV6Sn6	Accepted as Invited Talk	Ming Shi	Zhejiang University China
17:00-17:30	Signatures of spin-polarized p-wave superconductivity in the kagome material RbV3Sb5	Accepted as Invited Talk	Ben-Chuan Lin	International Quantum Academy, Southern University of Science and Technology China
17:30-18:00	Spin waves and orbital contribution to ferromagnetism in the topological metal Fe3Sn2	Accepted as Contributed Talk	Thorsten Schmitt	Paul Scherrer Institut Switzerland

HALL 5 - Aristo

Device Physics of Josephson Junctions and Their Fundamental Technologies

HALL 5 - Aristo	14:45	Co-organizers: Yılmaz Simsek, Olcay Kızılaslan

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Yilmaz Simsek & Matteo Carrega				
14:45-15:15	Josephson Plasma Wave Propagation in Bi2Sr2CaCu2O8 crystals and Effects of Introducing Magnetic Vortices	Accepted as Invited Talk	Timothy Benseman	Queens College, City University of New York USA
15:15-15:45	Evaluation of on-chip SQUID sensor arrays to monitor vortex position and translation	Accepted as Invited Talk	Coenrad Fourie	SUN Magnetics South Africa
15:45-16:15	Hybrid Josephson junctions based on InSb nanoflags	Accepted as Invited Talk	Matteo Carrega	cnr-spin Italy
16:15-16:30	**Coffee Break**			
Session Moderators: Huabing Wang & Timothy Benseman				
16:30-17:00	Rectification effect in a van der Waals superconductor	Accepted as Invited Talk	Yuki Itahashi	RIKEN, Center of Emegent Matter Science Japan
17:00-17:20	Simulation of Mutually Synchronized Bi-2212 THz Emitters	Accepted as Invited Talk	Olcay KIZILASLAN	Inonu Universty Türkiye
17:20-17:40	Scalable High-temperature Intrinsic Josephson Diode	Accepted as Contributed Talk	Zihan Wei	Purple Mountain Laboratories，China China
17:40-18:00	Near-Field Characterization of Microwave Chips Based on	Accepted as Contributed	Ping Zhang	Purple Mountain Laboratories

Time	Title	Status	Author	Affiliation/Country
	Josephson Probe Microscopy	Talk		China

HALL 6 - Eflatun

New Phenomena and Applications in Molecular Magnets

HALL 6 - Eflatun | **14:45** | **Co-organizers: Ana Arauzo & Elena Bartolomé**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Ana Arauzo & Mallah Talal				
14:45-15:15	Trityl-Based Radicals for Nanothermometry and Advanced Optoelectronic Applications	Accepted as Invited Talk	Imma Ratera	Institut de Ciència de Materials de Barcelona (ICMAB-CSIC) Spain
15:15-15:45	Multivariate Carborane Metal-Organic Frameworks for Quantum Computing	Accepted as Invited Talk	Elena Bartolome	Institut de Ciència de Materials de Barcelona (ICMAB) Spain
15:45-16:15	Revealing the Magnetic Moment Configuration of a Co-citrate Cubane with Inelastic Neutron Scattering and Ab Initio Calculations	Accepted as Invited Talk	Javier Rubín	Institute of Nanoscience and Materials of Aragón. CSIC-University of Zaragoza. Spain
16:15-16:30	**Coffee Break**			
Session Moderators: Elena Bartolomé & Kasper Pedersen				
16:30-17:00	Quantum Optical Control of Spin in a Tb Single Ion Magnet	Accepted as Invited Talk	Ana Arauzo	INMA - Universidad de Zaragoza Spain

Time	Title	Status	Author	Affiliation/Country
17:00-17:20	Spin-split edge states in metal-supported graphene nanoislands	Accepted as Invited Talk	Aitor Mugarza	Catalan Institute of Nanoscience and Nanotechnology - ICN2 Spain
17:20-17:40	Kondo Resonance and Molecular Spintronics Based on LnPc2 Single-Molecule Magnets	Accepted as Invited Talk	Masahiro Yamashita	Tohoku University Japan
17:40-18:10	**[Canceled] Molecular Magnetic Mosaics Losing Their Innocence - Kasper Pedersen**			

HALL 7 - Hipokrat

Superconductivity and Magnetism in Heavy Fermion Systems

HALL 7 - Hipokrat | **14:45** | **Co-organizers: Duygu Yazici & Tuson Park**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Duygu Yazici & Tuson Park				
14:45-15:15	From phonons to domain walls, the central peak and “critical slowing down”	Accepted as Keynote Talk	Annette Bussmann-Holder	Max-Planck-Institute for Solid State Research Germany
15:15-15:45	Unconventional modulated orders in quantum materials	Accepted as Invited Talk	Andras Szabo	ETH Zurich Switzerland
15:45-16:15	Effect of Electron-Doping in Strongly Correlated Ba2NaOsO6 Dirac-Mott Insulator	Accepted as Invited Talk	Samuele Sanna	Department of Physics and Astronomy University of Bologna Italy
16:15-16:30	**Coffee Break**			

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Duygu Yazici & Tuson Park				
16:30-16:55	Driving Advances in Strongly Correlated Electron Materials	Accepted as Keynote Talk	Duygu Yazici Çelik	TÜBİTAK Türkiye
16:55-17:20	Fermi Surface Characteristics in FeP2	Accepted as Invited Talk	Cedomir Petrovic	Shanghai Advanced Research in Physical Sciences China
17:20-17:45	High magnetic field superconductivity and quantum criticality in UTe2	Accepted as Invited Talk	Alexander Eaton	University of Cambridge United Kingdom
17:45-18:10	Imaging Odd-Parity Quasiparticle Interference in the Superconductive Surface State of UTe2	Accepted as Invited Talk	Shuqiu Wang	University of Bristol United Kingdom

HALL 8 - İbn-i Sina

Advances in Iron-based Superconductors: Growth, fundamental and applied research

HALL 8 - İbn-i Sina | **14:45** | **Co-organizers: Shiv Singh**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Shiv Singh & Pascal Reiss				
14:45-15:15	Unconventional Signatures of a Quantum Griffiths Phase in the Vicinity of a Quenched Nematic Quantum Critical Point	Accepted as Keynote Talk	Pascal Reiss	MPI for Solid State Research Germany

Time	Title	Status	Author	Affiliation/Country
15:15-15:35	Signatures of nematic superconductivity in muon-spin rotation measurements of LiFeAs	Accepted as Invited Talk	Gianrico LAMURA	CNR-SPIN Italy
15:35-15:55	Superconducting Order Parameter in Magnetic EuCsFe4As4 and Non-Magnetic CaKFe4As4 Pnictides of the Novel 1144 Family	Accepted as Invited Talk	Tatiana Kuzmicheva	Lebedev Physical Institute, Russian Academy of Sciences Russia
15:55-16:15	Impurity Effects on the Superconducting Properties of Stoichiometric CaKFe4As4 by Conventional and High-pressure Growth Methods	Accepted as Invited Talk	Shiv Singh	Institute of High Pressure Physics, Warsaw POLAND Poland
16:15-16:30	**Coffee Break**			
Session Moderators: Shiv Singh & Pascal Reiss				
16:30-17:00	Disorder-Induced Universality and Scaling in Hole-Doped Iron-Based Superconductors	Accepted as Keynote Talk	Omar Chmaissem	Physics Department, Northern Illinois University USA
17:00-17:30	Single crystal growth of iron-based superconductors with complex structures	Accepted as Invited Talk	Hiraku Ogino	National Institute of Advanced Industrial Science and Technology (AIST) Japan
17:30-18:00	High-temperature topological superconductivity through tuning electronic correlation in doped FeSe/SrTiO3	Accepted as Invited Talk	Subhasish Mandal	Department of Physics and Astronomy, West Virginia University USA
18:00-18:20	Magnetotransport Properties and Spectroscopic Study of K0.8Fe1.7(Se,S)2 Selenides with Natural Phase Separation	Accepted as Contributed Talk	Tatiana Kuzmicheva	Lebedev Physical Institute, Russian Academy of Sciences Russia

HALL 9 - Halide Edib Adıvar

Vortex Matter, Dynamics and Pinning

HALL 9 - Halide Edib Adıvar | **14:45** | **Co-organizers: Adrian Crisan & Massimiliano Polichetti**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Vladimir Kozhevnikov & Howon Kim				
14:45-15:15	High frequency vortex motion physics in Nb- and Fe- based superconductors	Accepted as Keynote Talk	Nicola Pompeo	University Roma Tre Italy
15:15-15:45	Ion irradiation effects on the high-frequency vortex dynamics of low-Tc and high-Tc superconductors	Accepted as Invited Talk	Gianluca Ghigo	Politecnico di Torino Italy
15:45-16:15	Analysis of the Rhombic-to-Square Transition in the Bragg Vortex Glass Phase of an overdoped BaFe2(As1−xPx)2 crystal using multi-harmonic AC magnetic susceptibility	Accepted as Invited Talk	Massimiliano Polichetti	University of Salerno - Department of Physics Italy
16:15-16:30	**Coffee Break**			
Session Moderators: Massimiliano Polichetti & Nicola Pompeo				
16:30-16:50	Vortex Dynamics in BaFe2(As0.68P0.32)2, CaKFe4As4 and EuRbFe4As4: a Comparative Study of DC Magnetization and AC Susceptibility Response	Accepted as Contributed Talk	Adrian Crisan	National Institute of Materials Physics Bucharest-Magurele Romania
16:50-17:10	Complex Flux Flow of Vortex Lattice in Superconducting NbN Films	Accepted as Contributed Talk	Mikhael Vasyutin	Ogarev Mordovia State University Russia
17:10-17:30	Small Angle Scattering of Neutrons in a Superconductor in the Meissner and Mixed States	Accepted as Contributed Talk	Vladimir Kozhevnikov	Tulsa Community College; KU Leuven USA

FOYER

Poster Session

FOYER	18:15	Mustafa Akdoğan & Haluk Koralay & Özgür Öztürk & Javier Campo until 19:45

Time	Title	Status	Author	Affiliation/Country
18:15-18:30	Thermal-Based Microwave Superconducting Series Switch for Quantum Applications	Accepted as Poster Presentation	Osman Akkaya	Master of Science Student Türkiye
18:30-18:45	ESR of EuSn2As2 Crystals in the Vicinity of the Magnetic Ordering Temperature.	Accepted as Poster Presentation	Diana Zhelezniakova	Zavoisky Physical-Technical Institute, FRC Kazan Scientific Center of RAS Russia
18:45-19:00	Thermal-Based Microwave Superconducting Shunt Switch for Quantum Applications	Accepted as Poster Presentation	Mustafa Nuri Akarsubaşı	TOBB Economy and Technology University Türkiye
19:00-19:15	Silicon Photomultipliers for Enhanced LİDAR Bathymetric Applications	Accepted as Poster Presentation	Khayala Huseynzada	+994507109001 Azerbaijan
19:15-19:30	Superconducting Properties of MgB_2: The Role of Multi-Walled Carbon Nanotube Doping	Accepted as Poster Presentation	Kıvılcım Sönmez	Ankara University Türkiye
19:30-19:45	Critical Behavior of Magnetic and Transport Parameters of EuFe2As2 Near the Magnetic Ordering Temperature.	Accepted as Poster Presentation	Ilnur Gimazov	Kazan Physical-Technical Institute, FRC Kazan Scientific Center of RAS Russia
19:45-20:00	Short-Term Electromagnetic Field Measurements and Evaluations in Parks Located Near the High Voltage Line in Ankara	Accepted as Poster Presentation	Nazlı KARABIYIK	Gazi University Türkiye
20:00-20:00	Magnetic confinement in a toroidal SMES using magnetic screens made from HTS tape	Accepted as Poster Presentation	Belen Rivera	Universidad de Extremadura Spain

Time	Title	Status	Author	Affiliation/Country
20:00-20:00	Dynamical Optical Soliton Solutions for (n+1)-Dimensional Generalized Kadomtsev-Petviashili Equation Using Two Advanced Analytical Approaches	Accepted as Poster Presentation	Alhaji Tahir	Modibbo Adama University Nigeria
20:00-20:00	DOPING AND PRESSURE EFFECTS ON THE CRYSTAL STRUCTURE AND SUPERCONDUCTING CRITICAL TEMPERATURE OF HG-1212.	Accepted as Poster Presentation	Abdullo Ahadov	Bukhara State University Uzbekistan
20:00-20:00	Doping Evolution of Na(Fe,Co)As Superconducting Gap Structure: Influence of Spin Fluctuations	Accepted as Poster Presentation	Tatiana Kuzmicheva	Lebedev Physical Institute, Russian Academy of Sciences Russia
20:00-20:00	Tuning the Structural and Electrical Properties of Transition Metal Phosphates through Synthesis and Thermal Treatment for Supercapacitor Applications	Accepted as Poster Presentation	Haider Ali	COMSATS University Islamabad Pakistan
20:00-20:00	Two-fold Symmetric Superconductivity in the Kagome Superconductor AV3Sb5	Accepted as Poster Presentation	Shuo Wang	Southern University of Science and Technology China
20:00-20:00	Time-reversal Symmetry Breaking in the Superconducting States of RbV3Sb5	Accepted as Poster Presentation	Xinjie Liu	International Quantum Academy, Shenzhen China
20:00-20:00	Magnetic and Transport Properties of 2D Van Der Waals Semiconductor CrGa2Te7	Accepted as Poster Presentation	Jyoti	Department of Physics, Indian Institute of Technology, Kanpur 208016, India India
20:00-20:00	Controlled Release of Tetracycline Using Magnetic Spinel Ferrite Nanoparticles	Accepted as Poster Presentation	Hakan GUNGUNES	Hitit Universty Türkiye
20:00-20:00	MAGNETICALLY RECOVERABLE COBALT-DOPED IRON OXIDE NANOCOMPOSITE FOR EFFICIENT TETRACYCLINE DEGRADATION	Accepted as Poster Presentation	Çiğdem DÖNMEZ GÜNGÜNEŞ	Hitit Üniversitesi Sağlık Bilimleri Fakültesi Beslenme ve Diyetetik Bölümü Türkiye

Time	Title	Status	Author	Affiliation/Country
20:00-20:00	Origins of anomalies in the temperature dependences of basic superconducting parameters in high-Tc cuprates: Signatures of Bose-liquid superconductivity	Accepted as Poster Presentation	Eldor Karimbaev	1Institute of Nuclear Physics, Uzbek Academy of Sciences, 100214, Tashkent, Uzbekistan 2Institute of Uzbekistan
20:00-20:00	High-pressure growth effects on high Tc iron-based superconductors	Accepted as Poster Presentation	Shiv Singh	Institute of High Pressure Physics, Warsaw POLAND Poland
20:00-20:00	Magnetic Properties in Arrays of Pulse-Electrodeposited CoCr Nanowires with Different Lengths: A First-Order Reversal Curve Investigation	Accepted as Poster Presentation	Masoumeh Khoshniyat	Isfahan Science and Technology Park, IRAN Iran
20:00-20:00	Rare-Earth Borides for Potential Superconducting Materials	Accepted as Poster Presentation	Burçak Boztemur	Istanbul Technical University Türkiye
20:00-20:00	Reaction Kinetics and Cu Doping Effects in MgB_2 Wires Fabricated via the IMD Method	Accepted as Poster Presentation	Ayten Seckin	Gazi University Türkiye
20:00-20:00	Optimization of IMD-Processed MgB_2 Wires for High-Field Applications	Accepted as Poster Presentation	Yusuf Oznal	Ankara Üniversitesi Türkiye
20:00-20:00	Comparison of YBCO Bulk Superconductors Fabricated by BSIG and TSMG Methods with Different Seed Materials	Accepted as Poster Presentation	Fatima Al-Mokdad	Ankara University Türkiye
20:00-20:00	Design and Implementation of a Josephson Parametric Amplifier Characterization Setup	Accepted as Poster Presentation	Hüsnü Erman Nadas	TOBB University of Economics and Technology, Dept. of Electrical and Electronics Türkiye
20:00-20:00	Electric and Magnetic Properties of YCuOx(x = 2,25-2,35): a Road to Room Temperature Superconductivity	Accepted as Poster Presentation	Danijel Djurek	Alessandro Volta Applied Ceramics (AVAC) Croatia
20:00-20:00	Warping Quantum and Classical Time: Fast-Forwarding Adiabatic Evolution for Ultra-Efficient State Control	Accepted as Poster Presentation	Jasur Matrasulov	Kimyo International University in Tashkent Uzbekistan

Time	Title	Status	Author	Affiliation/Country
20:00-20:00	Effect of magnetic impurity Fe on the physical properties of the TlInTe2 compounds	Accepted as Poster Presentation	Nadir Abdullayev	Institute of Physics, Azerbaijan National Academy of Sciences Azerbaijan
20:00-20:00	Pair Breaking Effects as probed by Non-Resonant Microwave Absorption in a Ba1-xKxFe2As2 Single Crystal	Accepted as Poster Presentation	Tshiwela Ramashitja	University of South Africa college of science and engineering, the science campus South Africa
20:00-20:00	ESR of EuSn2As2 Crystals in the Vicinity of the Magnetic Ordering Temperature	Accepted as Poster Presentation	Diana Zhelezniakova	Zavoisky Physical-Technical Institute, FRC Kazan Scientific Center of RAS Russia
20:00-20:15	Measuring Quantum Entanglement in Quantum States Using Machine Learning Algorithms	Accepted as Poster Presentation	Mahmoud Mahdian	University of Tabriz Iran
20:15-20:15	Automatic Target Recognition (ATR) using Quantum-enhanced Neural Networks	Accepted as Poster Presentation	Gabriel Martinez	Politecnico di Milano Italy
20:15-20:15	Resistive switching effect in Pure and Ga3+doped Cobalt Ferrites for RRAM Applications	Accepted as Poster Presentation	Haroon Mazhar	Applied Thermal Physics Laboratory(ATPL), Department of Physics, COMSATS University. Pakistan
20:15-20:15	Investigation of Structural, Dielectric, and Transport Properties of Nd substituted Calcium Bismuth Cobaltite’s.	Accepted as Poster Presentation	Haris Kiani	Applied Thermal Physics Laboratory (ATPL), Department of Physics, COMSATS University Pakistan
20:15-20:15	Structural and Electrical Transport Properties of Transition Metal Oxide Composite with CNTs	Accepted as Poster Presentation	Ruqia Masroor	Students Pakistan
20:15-20:15	Large Anomalous Hall Effect and Crystalline Electric Field in Topological Semimetal PrGaSi Single Crystal	Accepted as Poster Presentation	Rajesh Swami	Department of Physics, Indian Institute of Technology, Kanpur 208016, India India
20:15-20:15	Optimizing Rare Earth-Doped Zn-Mn-Co Ferrites for	Accepted as Poster	Haroon Mazhar	Applied Thermal Physics

Time	Title	Status	Author	Affiliation/Country
	Improved Performance in Fuel Cell Technology	Presentation		Laboratory(ATPL), Department of Physics, COMSATS University. Pakistan
20:15-20:15	Reduced decay in Josephson coupling across ferromagnetic junctions with spin–orbit coupling layers	Accepted as Poster Presentation	Ivan Kindiak	Max Planck Institute for Microstructure physics Germany
20:15-20:15	Correlation Functions of Magnetic Anisotropy Axes in 2D Systems of Ferromagnetic Nanoparticles	Accepted as Poster Presentation	Serghej Prischepa	BSUIR Belarus
20:15-20:15	Optical Pumping Polarization Effects on Double Resonance of Zeeman Sublevels in Rb Atomic Clocks	Accepted as Poster Presentation	seyedeh Mehri Hamidi	Shahid Beheshti University Iran
20:15-20:15	Mn Impurity in InN Nanoribbon: an Ab Initio Investigation	Accepted as Poster Presentation	Zakir Jahangirli	Institute of Physics, Ministry of Science and Education of Azerbaijan Azerbaijan
20:15-20:15	Phonon Mechanism of Superconductivity: Out-of-plane Ionicity versus in-plane Covalency Interplay Driven Real Space Electron-Hole Pairing Characterized by CPT Symmetry	Accepted as Poster Presentation	GUERFI Tarek	Department of Physics, Faculty of Sciences M'hamed bougara University, Boumerdes, Algeria Algeria
20:15-20:15	Bogoliubov-de Gennes Equation on Graphs: A Model for Tree-Branched Majorana Wire Network	Accepted as Poster Presentation	Mashrab Akramov	National University of Uzbekistan Uzbekistan
20:15-20:15	Optical parameters of TlFeS2 and TlFeSe2 magnetic semiconductors	Accepted as Poster Presentation	Nadir Abdullayev	Institute of Physics, Azerbaijan National Academy of Sciences Azerbaijan
20:15-20:15	Synergistic Effects of Charged-State Nitrogen Ions in Silicon Nanomaterials	Accepted as Poster Presentation	Aakash Gaikwad	Student India
20:15-20:15	Transparent quantum networks	Accepted as Poster Presentation	Jambul Yusupov	Kimyo International University in Tashkent Uzbekistan

Time	Title	Status	Author	Affiliation/Country
20:15-20:15	High sensitivity and low hysteresis of humidity sensors based on imidazole derivative	Accepted as Poster Presentation	Muneeb Rahman	Department of Physics Pakistan
20:15-20:15	Superparamagnetic Polymer-Based Nanocomposites Incorporating Iron Oxide And Multi-Walled Carbon Nanotubes	Accepted as Poster Presentation	Mammad Rajabov	Baku State University Azerbaijan
20:15-20:15	Quantum Charge Transport in Branched Molecular Chains	Accepted as Poster Presentation	Hikmat Matyakubov	Urganch State Pedagogical Institute, 220100, Gurlan Str., Urgench, UZBEKISTAN Uzbekistan
20:15-20:15	Critical Behavior of Magnetic and Transport Parameters of EuFe2As2 Near the Magnetic Ordering Temperature	Accepted as Poster Presentation	Ilnur Gimazov	Kazan Physical-Technical Institute, FRC Kazan Scientific Center of RAS Russia
20:15-20:15	Structural, and transport properties of double perovskite Bi2Ca2-xLaxCoO6, ceramics synthesized by co-precipitation method	Accepted as Poster Presentation	Yasir Abbas	COMSATS University Islamabad Pakistan
20:15-20:15	Quantum Mechanical Modeling and Experimental Design of a Magnetic Drug Delivery System for Antiepileptic Drug Targeting	Accepted as Poster Presentation	Çiğdem DÖNMEZ GÜNGÜNEŞ	Hitit Üniversitesi Sağlık Bilimleri Fakültesi Beslenme ve Diyetetik Bölümü Türkiye
20:15-20:15	Rotation-Induced Vortex Dynamics in Superconductors: Theoretical Framework and Applications in Neuromorphic Computing	Accepted as Poster Presentation	Surbhi Singla	Thomas Jefferson Science & Technology School USA
20:15-20:15	Probing Material Structures: Numerical Investigation of Disorder Effects on Vortex Core States	Accepted as Poster Presentation	Viacheslav Neverov	HSE University Russia
20:15-20:15	Synthesis and Characterization of 2D Nanomaterials for Energy Storage and Conversion	Accepted as Poster Presentation	Mohsen Mhadhbi	National Institute of Research and Physicochemical Analysis Tunisia

Time	Title	Status	Author	Affiliation/Country
20:15-20:15	Interplay between magnetism and Superconductivity above and below Tc in BaFe2-xCoxAs2	Accepted as Poster Presentation	Satyajit Banerjee	Dept of Physics, IIT Kanpur India
20:15-20:15	Tunneling Spectroscopy of Ba(Fe,Ni)2As2 Pnictides in the Normal State	Accepted as Poster Presentation	Tatiana Kuzmicheva	Lebedev Physical Institute, Russian Academy of Sciences Russia

Presentations

Sunday, April 27th, 2025

Previous Day Next Day

Presentations

Monday, April 28th, 2025

Previous Day | Next Day

Sessions by Room

Room Name	Session Name	Start Time
HALL 1 - Mevlana 1	Plenary	08:30:00
	Half-Plenary 1	14:00:00
	Advanced REBCO-based conductors for Large-scale HTS Applications in Energy Generation, Transmission, Storage and use in Energy-Efficient Devices	09:30:00
HALL 2 - Mevlana 2	Half-Plenary 2	14:00:00
	Novel Quantum Magnetism in Low Dimensions	09:30:00
HALL 3 - Yunus Emre 1	Advances in Current-Induced Magnetization Control	09:30:00
HALL 4 - Yunus Emre 2	Curvilinear and 3D Nanoarchitectures for Superconductivity and Magnetism	09:30:00
HALL 5 - Aristo	Device Physics of Josephson Junctions and Their Fundamental Technologies	09:30:00
	Superconducting Spintronics: Novel Quantum Circuits	14:45:00
HALL 6 - Eflatun	Spin transition materials: bulk to nano and toward quantum property	09:30:00
HALL 7 - Hipokrat	Correlated Quantum Matter	09:30:00
HALL 8 - İbn-i Sina	Superconducting Thin Films and Interface Superconductivity	09:30:00
	Advances in Thin Films, Multi-Layers and Patterned Nanostructures	14:45:00
HALL 9 - Halide Edib Adıvar	The Studies of Electronic Instabilities in Kagome Materials Using Spectroscopic Methods	09:30:00

	Permanent Magnets	11:00:00
	Nanocomposites: Properties and Applications	11:30:00
	Recent Progresses in Renewable Energy Technology and Its Implication: Materials Perspectives	14:45:00
	Numerical Modelling of Superconducting Materials and Applications	17:00:00

HALL 1 - Mevlana 1

Plenary

HALL 1 - Mevlana 1	08:30	Moderators: Ziad Melhem & Arno Godeke & Denys Makarov & Claire Donnelly

Time	Title	Status	Author	Affiliation/Country
Ziad Melhem & Arno Godeke				
08:30-09:15	REBCO-based, Coated Conductors for Large-scale HTS Applications	Accepted as Plenary Talk	Amit Goyal	University At Buffalo (SUNY-Buffalo) USA
09:15-18:15				
Denys Makarov & Claire Donnelly				
18:15-19:00	New Developments in Topological, Chiral and Reconfigurable Superconductor Nanoarchitectures.	Accepted as Plenary Talk	Vladimir Fomin	Leibniz Institute for Solid State and Materials Research (IFW) Dresden, Institute for Emerging Elect Germany
19:00-21:00	**Dinner**			

Time	Title	Status	Author	Affiliation/Country
21:00-22:30	**Panel Discussion**			

Half-Plenary 1

HALL 1 - Mevlana 1	14:00	Vladimir Fomin & Roland Wiesendanger

Time	Title	Status	Author	Affiliation/Country
14:00-14:40	Curvilinear Magnetism: Current Research and Technology Perspectives	Accepted as Half-Plenary Talk	Denys Makarov	Helmholtz-Zentrum Dresden-Rossendorf Germany
14:40-14:45	**Coffee Break**			
14:45-18:00	**Parallel Sessions**			

Advanced REBCO-based conductors for Large-scale HTS Applications in Energy Generation, Transmission, Storage and use in Energy-Efficient Devices

HALL 1 - Mevlana 1	09:30	Co-organizers: Amit Goyal

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Amit Goyal & Yue Zhao				

Time	Title	Status	Author	Affiliation/Country
09:30-10:00	Recent Status of Development and Production of Superconducting Wires for Compact Fusion and Electrical Aircraft Applications at Faraday Factory Japan	Accepted as Keynote Talk	Sergey Lee	Faraday Factory Japan LLC Japan
10:00-10:30	Mass Production and Performance of SST REBCO Tape	Accepted as Invited Talk	Sikan Chen	Shanghai Superconductor Technology Co., Ltd. China
10:30-11:00	Progress in 2G-HTS Tape Development at High Temperature Superconductors, Inc	Accepted as Invited Talk	Rohit Jain	High Temperature Superconductors Inc. USA
11:00-11:15	**Coffee Break**			
Session Moderators: Sergey Lee & Ines Wyrsta				
11:15-11:45	Development and scale up of high-performance REBCO tapes and round wires	Accepted as Keynote Talk	Venkat Selvamanickam	University of Houston USA
11:45-12:15	Co-Doping strategy for High-density Nanocolumn Formation in EuBa2Cu3O7-δ Films Deposited by Pulsed Laser Deposition at Ultra-Fast growth	Accepted as Invited Talk	Yue Zhao	shanghai jiao tong university China
12:15-12:45	Improvement of in-field properties with PLD and progress in production scale-up at SuNAM	Accepted as Invited Talk	SeungHyun Moon	SuNAM. CO. LTd, South Korea
12:45-14:15	**Lunch**			
14:15-14:45	**Half-Plenary Talk Hall 1 & Hall 2**			

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Yukata Yamada & Venkat Selvamanickam				
14:45-15:15	Recent Progress in Measurement- and Process-Informatics in REBCO Coated Conductors Manufacturing	Accepted as Keynote Talk	Takanobu Kiss	Kyushu University Japan
15:15-15:45	XRD and TEM characterization of YBCO nanostructure in 2G HTS wires	Accepted as Invited Talk	Mark Rikel	S-Innovations LLC Russia
15:45-16:15	Strain-Guided Ca Ion Diffusion in Multilayer BZO/YBCO Thick Films Towards Achieving High Jc in High Magnetic Fields	Accepted as Invited Talk	Judy Wu	University of Kansas USA
16:15-16:30	**Coffee Break**			
Session Moderators: Takanobu Kiss & Judy Wu				
16:30-17:00	High-Current Flexible Flat High Temperature Superconductor Cable.	Accepted as Keynote Talk	Daria Kolomentseva	SJSC SuperOx Russia
17:00-17:20	Influence of High-Pressure Post-Oxygenation on Structure, Critical Current Density and Charge Carrier Density of Superconducting EuBCO and GdBCO Coated Conductors	Accepted as Contributed Talk	Tetiana Prikhna	V. Bakul Institute for Superhard Materials of the National Academy of Sciences of Ukraine Ukraine
17:20-17:40	Strain Gage-based Methods for the Mechanical Characterization of REBCO CC Tapes for Superconducting Fault Current Limiters	Accepted as Contributed Talk	Angela Olchini	Ricerca sul Sistema Energetico RSE SpA Italy
17:40-18:00	Developing and Employing a Corona Discharge Ionisation Region for Mass Spectrometry: A study of Observing Plasma Behavior with Analogy to Unlimited Fusion Energy via Plasma	Accepted as Invited Talk	Aşan Bacak	Ankara Üniversitesi, TARLA, Türkiye

Time	Title	Status	Author	Affiliation/Country
	Confined by CC Based Superconducting Magnet			

HALL 2 - Mevlana 2

Half-Plenary 2

HALL 2 - Mevlana 2	14:00	Amit Goyal & Ali Bozbey

Time	Title	Status	Author	Affiliation/Country
14:00-14:40	Scaleup of the HTS Industry to Enable High-Field Magnets for Fusion Energy	Accepted as Half-Plenary Talk	Charlie Sanabria	Commonwealth Fusion Systems, USA
14:40-14:45	**Coffee Break**			
14:45-18:00	**Parallel Sessions**			

Novel Quantum Magnetism in Low Dimensions

HALL 2 - Mevlana 2	09:30	Co-organizers: Alexander Chernyshev & Mike Zhitomirsky

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Yasir Iqbal & Markus Branden				

Time	Title	Status	Author	Affiliation/Country
09:30-10:00	Gate-Tunable Induced Magnetism in a 2D Semiconductor	Accepted as Keynote Talk	Ahmet Avsar	National University of Singapore Singapore
10:00-10:30	Experimental realization of skyrmions and vortices on 3D curvilinear surfaces	Accepted as Invited Talk	Sabri Koraltan	Institute of Applied Physics, Technische Universität Wien Austria
10:30-11:00	Probing Fractionalized Excitations in Kitaev Spin Liquids via Phonon Dynamics	Accepted as Invited Talk	Natalia Perkins	University of Minnesota-Minneapolis USA
11:00-11:15	**Coffee Break**			
Session Moderators: Sabri Koraltan & Dmytro Pesin				
11:15-11:35	Magnetic Structures and Spin Excitations of the Spin-1/2 Triangular-lattice Antiferromagnet CsRESe2	Accepted as Contributed Talk	Tao Xie	Sun Yat-sen University China
11:35-11:55	Maple Leaf Antiferromagnet in a Magnetic Field	Accepted as Contributed Talk	Pratyay Ghosh	École Polytechnique Fédérale de Lausanne Switzerland
11:55-12:15	Quantum criticality and spinon excitations of Cu(μ -C2O4)(4-aminopyridine)2(H2O) in applied magnetic field	Accepted as Contributed Talk	Athira Suresh	Indian Institute of Science Education and Research(IISER), Thiruvananthapuram India
12:15-12:35	Magnetic long-range order in the purely organic triangular magnet TNN·CH3CN	Accepted as Contributed Talk	Miguel Pardo-Sainz	Aragón Nanoscience and Materials Institute (CSIC-University of Zaragoza) Spain
12:35-14:00	**Lunch**			
14:00-14:45	**Half-Plenary Talk Hall 1 & Hall 2**			

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Andreas Haller & Tao Xie				
14:45-15:15	Van der Waals Semiconductor heterojunction spintronics	Accepted as Invited Talk	Kaiyou Wang	Institute of Semiconductors, Chinese Academy of Sciences China
15:15-15:35	Large Room-Temperature Magnetoresistance in van der Waals Ferromagnet/Semiconductor Junctions	Accepted as Contributed Talk	Wenkai Zhu	Institute of Semiconductors, Chinese Academy of Sciences China
15:35-15:55	Ferromagnetic dimers in TX5 (T = W, Re, X = Br, Cl) family of compounds	Accepted as Contributed Talk	Olga Volkova	Lomonosov MSU Russia
15:55-16:15	Microwave Dielectric Resonances and Magnetic Loss of Lanthanum Strontium Manganese Oxide Nanoparticles in the 8.5 to 12.5 GHz Range	Accepted as Contributed Talk	Masoumeh Khosrozadeh	Urmia University, Dept. of Physics, Faculty of Sciences, Urmia, Iran Iran
16:15-16:30	**Coffee Break**			
16:30-17:00	Strain Tuning of Spin Liquids and Topological Flat Bands: Stress Reduces Frustration	Accepted as Invited Talk	Andrej Pustogow	TU Wien Austria
17:00-17:20	Magnetic and Transport Properties of Fe_3O_4/RGO Nanostructures: Insights into Spin-Glass Behavior and Spintronic Applications	Accepted as Contributed Talk	Mariam Mohammed	Kyungpook National University, South Korea

HALL 3 - Yunus Emre 1

Advances in Current-Induced Magnetization Control

HALL 3 - Yunus Emre 1	09:30	Co-organizers: Can Onur Avcı

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Can Onur Avci & Silvia Damerio				
09:30-10:00	Ultra-energy efficient picosecond SOT switching	Accepted as Keynote Talk	Jon Gorchon	Institut Jean Lamour, CNRS, Université de Lorraine France
10:00-10:30	Dynamical spin-orbit coupling in superconducting hybrid structures	Accepted as Invited Talk	Morten Amundsen	Norwegian Uni. of Sci. and Techn. Norway
10:30-11:00	Tunable spin and orbital torques in Cu-based magnetic heterostructures	Accepted as Invited Talk	Silvia Damerio	Institute of Materials Science of Barcelona (ICMAB-CSIC) Spain
11:00-11:15	**Coffee Break**			
Session Moderators: Witold Skowronski & Can Onur Avci				
11:15-11:45	Perpendicular Spins and Unusual Magnetoresistance in magnetic heterostructures	Accepted as Invited Talk	Lijun Zhu	Institute of Semiconductors, Chinese Academy of Sciences China
11:45-12:15	Orbital assisted spin torque memory and spin Hall nano oscillator	Accepted as Invited Talk	Rahul Gupta	University of Gothenburg Sweden
12:15-12:45				
12:45-14:00	**Lunch**			
14:00-14:45	**Half-Plenary Talk Hall 1 & Hall 2**			

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Juan Sierra & Jon Gorchon				
14:45-15:15	Stabilizing and Multiferroic Order and Topology in Ultrathin BiFeO3	Accepted as Keynote Talk	Lucas Caretta	Brown University USA
15:15-15:45	Ferroelectric Control of Ultrathin Ferromagnets in Contact with Hf0.5Zr0.5O2	Accepted as Invited Talk	Christian Rinaldi	Politecnico di Milano Italy
15:45-16:15	Symmetry Modulation and Multiferroic Characteristics of La/Ho Co-substituted BiFeO3 Ceramics	Accepted as Contributed Talk	Qingtian Li	School of Materials Science and Engineering, Zhejiang University China
16:15-16:30	**Coffee Break**			
Session Moderators: Lucas Caretta & Lijun Zhu				
16:30-17:00	Tunable nanoscale control of magnetism and superconductivity via phase nanoengineering	Accepted as Invited Talk	Edoardo Albisetti	Department of Physics - Politecnico di Milano Italy
17:00-17:30	Patterning gradients in thin film properties for spintronics	Accepted as Invited Talk	Lauren Riddiford	ETH Zurich/Paul Scherrer Institute Switzerland
17:30-18:00	Magnetogalvanic Effects in Tetragonal Antiferromagnets: CuMnAs, Mn2Au	Accepted as Invited Talk	Zukhra Gareeva	IMCP Russia

HALL 4 - Yunus Emre 2

Curvilinear and 3D Nanoarchitectures for Superconductivity and Magnetism

HALL 4 - Yunus Emre 2	09:30	Co-organizers: Vladimir Fomin & Denys Makarov

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Vladimir Fomin & Sol Jakobsen				
09:30-10:00	Tuning superconducting properties in 3D nanoarchitectures	Accepted as Keynote Talk	Elina Zhakina	Max Planck Institute for Chemical Physics of Solids Germany
10:00-10:30	DC-operated Josephson junction arrays as a cryogenic on-chip microwave measurement platform	Accepted as Keynote Talk	Joris Van de Vondel	KU LEUVEN Belgium
10:30-11:00	Strategies for quantum computation with superconducting quantum processors: performances benchmarking and solutions towards scalability	Accepted as Keynote Talk	Halima Giovanna Ahmad	Department of Physics Italy
11:00-11:15	**Coffee Break**			
Session Moderators: Paola Gentile & Oleksandr Dobrovolskiy				
11:15-11:45	Manipulating Magnetic Nanostructures through Field-Induced Ionic Migration and Flower-like Magnetic Metasurfaces	Accepted as Keynote Talk	Anna Palau	Institut de Ciència de Materials de Barcelona, ICMAB-CSIC Spain
11:45-12:05	Superconductivity in Laser Engineered Nb Nanoarchitectures	Accepted as Invited Talk	Antonio Badia Majos	Dep. of Condensed Matter Physics, University of Zaragoza Spain
12:05-12:25	Vortex Steering in 3D Curved Superconductor Membranes	Accepted as Invited Talk	Igor Bogush	CryoQuant, EMG, TU Braunschweig Germany
12:25-12:45	Statics and dynamics of quantum Bloch points in a	Accepted as Invited Talk	Vladyslav Kuchkin	University of Luxembourg Luxembourg

Time	Title	Status	Author	Affiliation/Country
	regularized micromagnetic model			
12:45-14:00	**Lunch**			
14:00-14:45	**Half-Plenary Talk Hall 1 & Hall 2**			
Session Moderators: Alexander Edström & Oleksandr Pylypovskyi				
14:45-15:15	Nonlocal Chiral Symmetry Breaking in Curvilinear Magnetism	Accepted as Keynote Talk	Denis Sheka	Taras Shevchenko National University of Kyiv Ukraine
15:15-15:45	Three-Dimensional Topological Spin Textures in Curved Chiral Magnets	Accepted as Keynote Talk	Luke Turnbull	Max Planck Institute for the Chemical Physics of Solids Germany
15:45-16:15	Magnetization Dynamics in Curved Nanostructures	Accepted as Keynote Talk	Claas Abert	University of Vienna Austria
16:15-16:30	**Coffee Break**			
Session Moderators: Denys Makarov & Luke Tumbull				
16:30-16:50	Enhanced Stress Stability in Flexible Co/Pt Multilayers with Strong Perpendicular Magnetic Anisotropy	Accepted as Invited Talk	Run-Wei Li	Eastern Institute of Technology, Ningbo China
16:50-17:10	Flexible and stretchable magnetoresistive structures enabled by high-throughput printing and post-processing approaches	Accepted as Invited Talk	Mykola Vinnichenko	Fraunhofer Institute for Ceramic Technologies and Systems IKTS Germany
17:10-17:30	Exploring Radial Magnetic Vortices in Hard/Soft Nanodisks	Accepted as Invited Talk	Gleb Kakazei	IFIMUP/Departamento de Fisica e Astronomia, Universidade do Porto Portugal

Time	Title	Status	Author	Affiliation/Country
17:30-17:50	Vortex Gyromodes in Thick Circular Magnetic Nanoelements	Accepted as Invited Talk	Sergey Bunyaev	IFIMUP, Universidade do Porto Portugal

HALL 5 - Aristo

Device Physics of Josephson Junctions and Their Fundamental Technologies

HALL 5 - Aristo	09:30	Co-organizers: Yılmaz Simsek & Olcay Kızılaslan

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Kyle Jackman & Yılmaz Simsek				
09:30-10:00	Near-Field Terahertz Detection with a Josephson Probe Microscope	Accepted as Invited Talk	Huabing Wang	Research Institute of Superconductor Electronics, Nanjing University China
10:00-10:30	SQUID Stack Interface Circuit with PAM-4 Encoding Scheme	Accepted as Invited Talk	Selcuk Kose	University of Rochester USA
10:30-11:00	Engineering high-Q superconducting tantalum microwave coplanar waveguide resonators for compact coherent quantum circuits	Accepted as Invited Talk	Kaveh Delfanazari	University of Glasgow United Kingdom
11:00-11:15	**Coffee Break**			
Session Moderators: Selcuk Kose & Kaveh Delfanazari				

Time	Title	Status	Author	Affiliation/Country
11:15-11:45	Advanced Simulation Techniques for Superconducting CPW Resonator Design	Accepted as Invited Talk	Kyle Jackman	SUN Magnetics South Africa
12:05-12:25	Healing the topmost Cu-O layer of Bi2Sr2CaCu2O8+x high-Tc superconductor by carrier injection	Accepted as Contributed Talk	Yılmaz Şimşek	Sabancı University Nanotechnology and Application Center Türkiye

Superconducting Spintronics: Novel Quantum Circuits

HALL 5 - Aristo	14:45	Co-organizers: Alexander A. Golubov

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Alexander Golubov & Valery Ryazanov				
14:45-15:15	Optical and Terahertz Radiation Methods of Flux Manipulation in Superconductors	Accepted as Keynote Talk	Alexander Buzdin	University of Bordeaux France
15:15-15:45	Spin transport with supercurrents	Accepted as Invited Talk	Jan Aarts	Leiden University/Huygens-Kamerlingh Onnes Laboratory Netherlands
15:45-16:15	Time-reversal Symmetry Breaking in Superconducting Domain Wall Josephson Junctions	Accepted as Invited Talk	Remko Fermin	University of Cambridge United Kingdom
16:15-16:30	**Coffee Break**			
Session Moderators: Jan Aarts & Alexander Buzdin				

Time	Title	Status	Author	Affiliation/Country
16:30-17:00	Andreev Supercurrent Transport in Josephson Nanostructures at Nonequilibrium Electron Distribution	Accepted as Keynote Talk	Valeriy Ryazanov	Moscow Institute of Physics and Technology Russia
17:00-17:20	Collective excitations in thin-film topological superconductor/ferromagnetic insulator heterostructures	Accepted as Invited Talk	Tairzhan Karabassov	Moscow Institute of Physics and Technology Russia
17:20-17:40	Full Counting Statistics for Unconventional Superconductor Junctions(Updated)	Accepted as Invited Talk	Alexander Golubov	MIPT Russia
17:40-18:00	Gate-controlled proximity effect in superconductor/ferromagnet van der Waals heterostructures	Accepted as Invited Talk	Grigorii Bobkov	Moscow Institute of Physics and Technology Russia

HALL 6 - Eflatun

Spin transition materials: bulk to nano and toward quantum property

HALL 6 - Eflatun | **09:30** | **Co-organizers: Shinya Hayami & Masahiro Yamashita**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Shinya Hayami & Martin Lemaire				
09:30-10:00	Electronic and spin delocalization in a switchable trinuclear triphenylene trisemiquinone bridged Ni3 and Co3 complex	Accepted as Keynote Talk	Mallah Talal	Université Paris-Saclay France
10:00-10:30	Chemical tuning of the quantum spin-electric coupling in molecular nanomagnets	Accepted as Invited Talk	Junjie Liu	Queen Mary University of London United Kingdom

Time	Title	Status	Author	Affiliation/Country
10:30-10:45	**Coffee Break**			
Session Moderators: Shinya Hayami & Mallah Talal				
10:45-11:15	Photoluminescence Sensitive to Photomagnetic Response in Lanthanide Octacyanidotungstate Bimetallic Layered Frameworks	Accepted as Invited Talk	Szymon Chorazy	Faculty of Chemistry, Jagiellonian University Poland
11:15-11:45	Control of Dimensionality and Electron-transferred Coupled Spin Transition in Metal Complexes	Accepted as Invited Talk	Yoshihiro Sekine	Kumamoto University Japan
11:45-12:15	Simultaneous manipulation of a spin crossover photomagnet by three external stimuli: pressure, temperature and visible light	Accepted as Invited Talk	Dawid Pinkowicz	Jagiellonian University, Faculty of Chemistry Poland
12:15-13:30	**Lunch**			
13:30-14:15	**Half-Plenary Talk Hall 1 & Hall 2**			
Session Moderators: Masahiro Yamashita & Arzu Kurt				
14:15-14:45	Control of Electric Polarization via Electron Transfer in Molecular Crystals	Accepted as Keynote Talk	Osamu Sato	Kyushu University Japan
14:45-15:15	Towards molecular controlled magnetism in 2D materials	Accepted as Invited Talk	José J. Baldoví	Instituto de Ciencia Molecular (ICMol), University of Valencia Spain
15:15-15:45	Spin Crossover System with Multifunction	Accepted as Invited Talk	Shinya Hayami	Kumamoto University Japan
15:45-16:00	**Coffee Break**			

HALL 7 - Hipokrat

Correlated Quantum Matter

HALL 7 - Hipokrat	09:30	Co-organizers: Tuson Park

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Tuson Park & Hironori Sakai				
09:30-10:00	Novel Magnetic Interactions and Quantum Anomalous Hall Effect in Two-Dimensional Magnetic Materials	Accepted as Invited Talk	Jaejun Yu	Seoul National University South Korea
10:00-10:30	Exploring the Interplay between Topology, Magnetism, and Correlations in Weyl Semimetals: Insights from CeAlSi and CeAlGe	Accepted as Invited Talk	Nicklas Michael	Max Planck Institute for Chemical Physics of Solids Germany
10:30-11:00	Signatures of unconventional superconductivity in the kagome superconductors Cs(V1-xTix)3Sb5	Accepted as Invited Talk	KEEHOON KIM	Seoul National Univerisity South Korea
11:00-11:15	**Coffee Break**			
Session Moderators: Leonardo Degiorgi & Di-Jing Huang				
11:15-11:45	Charge delocalization and Pseudogap in Ce-based Heavy Fermion Superconductors	Accepted as Invited Talk	Tuson Park	Sungkyunkwna University South Korea
11:45-12:15	Magnetism in uranium-based van der Waals compound α-UTe3	Accepted as Invited Talk	Hironori Sakai	Advanced Science Research Center, Japan Atomic Energy Agency Japan

Time	Title	Status	Author	Affiliation/Country
12:15-12:35	Zero-field superconducting diode effect and interference patterns in Kagome CsV3Sb5	Accepted as Contributed Talk	Tian Le	Zhejiang University China
12:35-14:00	**Lunch**			
14:00-14:45	**Half-Plenary Talk Hall 1 & Hall 2**			
Session Moderators: Jejun Yu & Nicklas Michael				
14:45-15:15	Chiral phonons induced by helical spins in a multiferroic	Accepted as Invited Talk	Di-Jing Huang	National Synchrotron Radiation Research Center (NSRRC) Taiwan
15:15-15:45	Engineering Quantum Phenomena and Electronic Structures on Oxide Interfaces	Accepted as Invited Talk	Byungmin Sohn	SungKyunKwan University South Korea
15:45-16:15	Ingredients for enhanced thermoelectric power at cryo-temperatures in the correlated CoSbS semiconductor revealed by its optical response	Accepted as Invited Talk	Leonardo Degiorgi	ETH Zurich Switzerland
16:15-16:30	**Coffee Break**			
Session Moderators: Hironori Sakai & Tuson Park				
16:30-17:00	Berezinskii-Kosterlitz-Thouless quantum transition in (2+1) dimensions	Accepted as Invited Talk	Maria Cristina Diamantini	University of Perugia Italy
17:00-17:20	Composite magnetoelectric technique, a universal ultrahigh sensitive tool for correlated quantum matter	Accepted as Contributed Talk	YI SHENG CHAI	college of physics, Chongqing university China
17:20-17:40	$PrAgBi_2$: A Promising Quasi-Two-Dimensional System for	Accepted as Contributed	Sudip Malick	Faculty of Applied Physics and Mathematics, Gdansk

Time	Title	Status	Author	Affiliation/Country
	Hosting Dirac Fermions	Talk		University of Technology Poland

HALL 8 - İbn-i Sina

Superconducting Thin Films and Interface Superconductivity

HALL 8 - İbn-i Sina | **09:30** | **Co-organizers: Davor Pavuna & Neven Barisic**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: John Wei & Neven Barisic				
09:30-10:00	Charge Order, Superconductivity and Pseudogap in Y1-xPrxBa2Cu3O7 Thin Films.	Accepted as Keynote Talk	John Wei	University of Toronto Canada
10:00-10:30	Calculation by Eliashberg theory of critical current and critical electric field in thin superconducting films	Accepted as Invited Talk	Giovanni Ummarino	Politecnico di Torino Italy
10:30-11:00	Magnetic moment of thin film superconductors: When thickness matters	Accepted as Contributed Talk	Thomas Hauet	Institut Jean Lamour, Université de Lorraine-CNRS France
11:00-11:15	**Coffee Break**			
Session Moderators: John Wei & Neven Barisic				
11:15-11:45	Flux-current-field relation in a superconducting trap for a magnetic dipole	Accepted as Invited Talk	Carles Navau	Universitat Autònoma de Barcelona Spain

Time	Title	Status	Author	Affiliation/Country
11:45-12:15	Exploring Unconventional Electron Distribution Patterns: Contrasts Between FeSe and FeSe/STO Using an Ab Initio Approach	Accepted as Invited Talk	Chi Ho WONG	Division of Science, Engineering, and Health Studies, School of Professional Education and Executive Hong Kong
12:15-12:45	REBCO tape Joints for the Potential Superconducting Application	Accepted as Contributed Talk	Canan Aksoy	Karadeniz Technical University Türkiye

Advances in Thin Films, Multi-Layers and Patterned Nanostructures

HALL 8 - İbn-i Sina | **14:45** | **Co-organizers: Mürsel Alper**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Mehmet Ali Aksan & Junjie Li				
14:45-15:15	Bridging Scales: Modeling and Imaging Current Flow in 2D Semiconductor Nanosheet Networks	Accepted as Invited Talk	Jelena Pesic	Center for Solid State Physics and New Materials, Institute of Physics Belgrade, University of Belgr Serbia
15:15-15:35	Engineering of Ferromagnetic Ga Vacancies in β-Ga2O3 Thin Films Grown by Liquid-Injection Metal-Organic-Chemical-Vapor-Deposition via Forming Gas Annealing	Accepted as Contributed Talk	Fridrich Egyenes	Institute of Electrical Engineering, Slovak Academy of Sciences, Dubravska cesta 9, Bratislava, Slo Slovakia
15:35-15:55	Ultrafine Silver Nanowires-Assisted Physical and Chemical Cross-Linking of MXene Sheets with Ultrahigh Mechanical Strength for Exceptional Electromagnetic Interference Shielding	Accepted as Contributed Talk	Shahzad Hussain	COMSATS University Islamabad Pakistan

Time	Title	Status	Author	Affiliation/Country
15:55-16:15	Analyzing tetra hybrid nanofluid flow influenced by a magnetic field in an absorbent channel with quadratic thermal radiative heat flux and surface catalyzed reactions	Accepted as Contributed Talk	Muhammad Ramzan	Bahria University Pakistan
16:15-16:30	**Coffee Break**			
Session Moderators: Mehmet Ali Aksan & Jelena Pesic				
16:30-17:00	Structural and Electrical Characterization of Ag/TNR2/p-Si/Al Device with TiO_2 Nanorod Interface Grown on p-Si Substrate by Hydrothermal Method	Accepted as Invited Talk	Haluk Koralay	Gazi University Türkiye

HALL 9 - Halide Edib Adıvar

The Studies of Electronic Instabilities in Kagome Materials Using Spectroscopic Methods

HALL 9 - Halide Edib Adıvar | **09:30** | **Co-organizers: Ming Shi & Yu Song & Yang Liu**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Sergei Ovchinnikov & Michael Merz				
09:30-10:00	Phase diagram of and quantum criticality in $Sc(V_{1-x}Cr_x)_6Sn_6$	Accepted as Invited Talk	Michael Merz	Karlsruhe Institute of Technology Germany

Time	Title	Status	Author	Affiliation/Country
10:00-10:20	On the critical behavior of NdTi3Bi4 topological Kagome single crystal	Accepted as Contributed Talk	Khalil Ziq	Physics Department King Fahd University of Petroleum and Minerals Saudi Arabia
10:20-10:40	Depth-Dependent Study of Time-Reversal Symmetry-Breaking in Kagome Superconductors AV3Sb5	Accepted as Contributed Talk	Jennifer Graham	Paul Scherrer Institute Switzerland

Permanent Magnets

HALL 9 - Halide Edib Adıvar	11:00	Co-organizers:

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Sergei Ovchinnikov & Michael Merz				
11:00-11:30	New Routes for Novel Iron-Based Hard Magnets	Accepted as Contributed Talk	Samuele Sanna	Department of Physics and Astronomy University of Bologna Italy

Nanocomposites: Properties and Applications

HALL 9 - Halide Edib Adıvar	11:30	Co-organizers:

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Sergei Ovchinnikov & Michael Merz				
11:30-11:50	Magnetic Recycled Photocatalyst in Produced Water Treatment in the	Accepted as Contributed Talk	Basma Hadi	Beirut Arab Unversity

Time	Title	Status	Author	Affiliation/Country
	Sultanate of Oman			Lebanon

Recent Progresses in Renewable Energy Technology and Its Implication: Materials Perspectives

HALL 9 - Halide Edib Adıvar	14:45	Co-organizers: German Francisco de la Fuente & Muhammad Anis-ur-Rehman

Time	Title	Status	Author	Affiliation/Country
Session Moderators: German Francisco de la Fuente & Muhammad Anis-ur-Rehman				
14:45-15:15	Thermal Storage Capacity in Different Geological Formations: Examples from Türkiye	Accepted as Keynote Talk	Yusuf Kadıoğlu	Ankara University Türkiye
15:15-15:45	Carbon/Metal oxide/polymer based Composites for Energy storage and Water Treatment	Accepted as Invited Talk	Zohra Kayani	Lahore College for Women University, Lahore Pakistan
15:45-16:15	Quantum scattering interference process that enhances the thermoelectric efficiency in quantum dot systems: Its manifestation in photoemission spectroscopy and inverse photoemission spectroscopy.	Accepted as Invited Talk	Roberto Franco Peñaloza	Physics Department, Colombia National Unuversity Colombia
16:15-16:30	**Coffee Break**			
Session Moderators: German Francisco de la Fuente & Muhammad Anis-ur-Rehman				
16:30-16:50	Appraisal of nano-sized magnetically frustrated hexaferrites for potential applications	Accepted as Contributed Talk	Imran Sadiq	University of the Punjab, Lahore Pakistan
16:50-17:10	Magnetic phase suppression, and Irreversible Phase transformation in	Accepted as Contributed	Wiqar Shah	International Islamic University, Islamabad

Time	Title	Status	Author	Affiliation/Country
	Doped Rare-Earth Manganites nano-particles	Talk		Pakistan

Numerical Modelling of Superconducting Materials and Applications

HALL 9 - Halide Edib Adıvar | **17:00** | **Kevin Berger & Barış Güner**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: German Francisco de la Fuente & Kevin Berger				
17:00-17:30	Advances in multiscale simulations of superconducting electronics	Accepted as Keynote Talk	Milorad Milosevic	COMMIT lab, Departement Fysica, Universiteit Antwerpen Belgium
17:30-17:50	Holistic Numerical Simulation of a Quenching Process on a Real-size Multifilamentary Superconducting Coil	Accepted as Contributed Talk	Hanxi Ren	School of Aeronautics, Northwestern Polytechnical University China
17:50-18:10	Magnetic Levitation of Superconducting Particles in Magnetic Traps	Accepted as Contributed Talk	Natanael Bort-Soldevila	Univertitat Autonoma Barcelona Spain

Presentations

Tuesday, April 29th, 2025

Previous Day | Next Day

Sessions by Room

Room Name	Session Name	Start Time
HALL 1 - Mevlana 1	Plenary	08:30:00
	Half-Plenary 1	14:00:00
	Advances and Challenges in the Commercialization of Superconductivity Applications	09:30:00
HALL 2 - Mevlana 2	Half-Plenary 2	14:00:00
	Novel Functional Magnetic Materials- Basic Approach and Applications	09:30:00
HALL 3 - Yunus Emre 1	Atomic-level engineering of novel magnetic and superconducting states	09:30:00
	Superconductivity and Topology in PtBi2	16:30:00
HALL 4 - Yunus Emre 2	Curvilinear and 3D Nanoarchitectures for Superconductivity and Magnetism	09:30:00
HALL 5 - Aristo	Device Physics of Josephson Junctions and Their Fundamental Technologies	09:30:00
	Advances in Current-Induced Magnetization Control	14:45:00
HALL 6 - Eflatun	Quantum emission and defects in solid state materials	09:30:00
	Electronic Orders and Excitations in Quantum Materials by REIXS (Resonant Elastic & Inelastic X-ray Scattering)	14:45:00
HALL 7 - Hipokrat	Superconductors Under Extreme Conditions of Pressure and Strain	09:30:00
HALL 8 - İbn-i Sina	From disorder to metastability and hidden phases in 2D quantum materials	09:30:00

HALL 9 - Halide Edib Adıvar	Micromagnetics and Modeling	09:30:00
	Nonadiabatic Dynamics in Materials	16:30:00
FOYER	Poster Session	18:15:00

HALL 1 - Mevlana 1

Plenary

HALL 1 - Mevlana 1	08:30	Irfan Siddiqi & Oleg Mukhanov

Time	Title	Status	Author	Affiliation/Country
08:30-09:15	Superinsulation and Bose (or anomalous) metals	Accepted as Plenary Talk	Carlo Trugenberger	SwissScientific Technologies SA Switzerland
09:15-19:00				
19:00-21:00	**Dinner**			
21:00-22:30	**Panel Discussion**			

Half-Plenary 1

HALL 1 - Mevlana 1	14:00	Can Onur Avcı & Selvan Demir

Time	Title	Status	Author	Affiliation/Country
14:00-14:40	Spin-based nonvolatile memories, unconventional computing, and energy harvesting	Accepted as Half-Plenary Talk	Hyunsoo Yang	National University of Singapore Singapore

Advances and Challenges in the Commercialization of Superconductivity Applications

HALL 1 - Mevlana 1 | **09:30** | **Co-organizers: Ziad Melhem**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Ziad Melhem & Joe Minervini				
09:30-10:00	The Superconducting Global Alliance (ScGA) progress in addressing challenges in the commercialisation of superconductivity	Accepted as Keynote Talk	Ziad Melhem	Oxford Quantum Solutions Ltd United Kingdom
10:00-10:30	Barriers to Commercialization of Superconducting Power and Energy Technologies	Accepted as Contributed Talk	Sastry Pamidi	Center for Advanced Power Systems & FAMU-FSU College of Engineering USA
10:30-11:00	Superconducting Traction Substation	Accepted as Invited Talk	Loic Queval	University Paris-Saclay France
11:00-11:15	**Coffee Break**			
Session Moderators: Ziad Melhem & Hiroyuki Ohsaki				
11:15-11:45	The Role of Superconducting Magnet Technology in Healthcare Applications	Accepted as Invited Talk	Joseph Minervini	Novum Industria LLC USA

Time	Title	Status	Author	Affiliation/Country
11:45-12:15	Progress and Challenges in Developing Commercial Medical Applications	Accepted as Invited Talk	Arno Godeke	Compact PT Netherlands
12:15-12:45	Recent Progress and Challenges in Characterization of HTS Tape Conductors for Commercial Applications	Accepted as Invited Talk	Takanobu Kiss	Kyushu University Japan
12:45-14:00	**Lunch**			
14:00-14:45	**Half-Plenary Talk Hall 1 & Hall 2**			
Session Moderators: Ziad Melhem & Sastry Pamidi				
14:45-15:15	Progress and Challenges in using HTS Materials for the Development of Commercial Transport Applications	Accepted as Invited Talk	Hiroyuki Ohsaki	University of Tokyo Japan
15:15-15:45	Development of HTS Propulsion System for Aircraft -Fully Superconducting Generator & Motor connected by Superconducting Cable-	Accepted as Invited Talk	TERUO IZUMI	Advanced Industrial Science and Technology Japan
15:45-16:15	Superconducting Magnetic Core Reactor: A Contribution to Efficient Power Flow Control in Transmission Grids	Accepted as Invited Talk	Joao Murta-Pina	Centre of Technology and Systems - UNINOVA Portugal
16:15-16:30	**Coffee Break**			
Session Moderators: Ziad Melhem & Takanobu Kiss				
16:30-17:00	Progress and Challenges in Using HTS Materials for the	Accepted as Invited Talk	Kohei Higashikawa	Kyushu University Japan

Time	Title	Status	Author	Affiliation/Country
	Development of Commercial SMES Applications			
17:00-17:30	Superconducting Transformer, Fault Current Limiter and Fault Tolerant Transformer: Advances, Challenges, and Pathways to Commercialization	Accepted as Invited Talk	Wenjuan Song	University of Glasgow United Kingdom
17:30-17:50	Preliminary Results of High-Velocity EDL Maglev Parameters Measurement Systems	Accepted as Contributed Talk	Hakki Mollahasanoglu	Recep Tayyip Erdogan University Türkiye

HALL 2 - Mevlana 2

Half-Plenary 2

HALL 2 - Mevlana 2	14:00	Yasuharu Kamioka & Yuta Ebara

Time	Title	Status	Author	Affiliation/Country
14:00-14:40	Advanced Cryogenic Cooling Techniques for HTS Devices for Energy and Transportation Applications	Accepted as Half-Plenary Talk	Sastry Pamidi	Center for Advanced Power Systems & FAMU-FSU College of Engineering USA

Novel Functional Magnetic Materials- Basic Approach and Applications

HALL 2 - Mevlana 2	09:30	Co-organizers: Arcady Zhukov & Kateryna Levada

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Arcady Zhukov & David Navas				
09:30-10:00	Magnetoplasmonic Nanocapsules as Wirelessly Controlled Nanotherapies	Accepted as Keynote Talk	Josep Nogues	Catalan Institute of Nanoscience and Nanotechnology (ICN2) Spain
10:00-10:20	Synthesis and characterization of high saturation magnetization and vortex nanostructures for biomedical applications	Accepted as Invited Talk	Célia Sousa	Autonomous University of Madrid Spain
10:20-10:40	Improved ferroelectricity and magnetoelectric coupling effect of multi-elements co-substituted BiFeO3 ceramics	Accepted as Invited Talk	Xiang Ming Chen	School of Materials Science and Engineering, Zhejiang University China
10:40-11:00	Synergistic Magnetic Nanoplatforms for Enhanced Magnetic Hyperthermia and Chemo-Dynamic Therapy in Cancer Treatment	Accepted as Contributed Talk	Deepika Sharma	Scientist D, Institute of Nano Science and Technology India
11:00-11:15	**Coffee Break**			
Session Moderators: Josep Nogues & Celia Sousa				
11:15-11:45	Magnetoelastic Coupling in Particulate Ni-Mn-Ga Laminate Composites	Accepted as Keynote Talk	Volodymyr Chernenko	BCMaterials & University of Basque Country & Ikerbasque Spain
11:45-12:05	Martensitic transformation in Ni2FeGa Glass-Coated Microwires	Accepted as Contributed Talk	Zuzana Vargova	Pavol Jozef Safarik University Slovakia
12:05-12:25	Enhanced mass sensitivity of self-biased magnetoelastic sensors by annealing-induced nanocrystallization.	Accepted as Contributed Talk	Andoni Lasheras	University of the Basque Country (UPV/EHU) Spain
12:25-12:45	Development of amorphous glass-coated microwires with high Giant Magneto-Impedance effect	Accepted as Contributed Talk	Arcady Zhukov	Dept. Polymers and Adv. Mater., UPV/EHU Spain

Time	Title	Status	Author	Affiliation/Country
12:45-14:00	**Lunch**			
14:00-14:45	**Half-Plenary Talk Hall 1 & Hall 2**			
Session Moderators: Rasitislav Varga Jose & Maria Porro				
14:45-15:15	Role of Rapid Annealing in Improving Grain Refinement and Magnetic Softness of FeNi-based Nanocrystalline Alloys	Accepted as Invited Talk	Ivan Skorvanek	Institute of Experimental Physics, Slovak Academy of Sciences Slovakia
15:15-15:45	Magnetization Dynamics of Ferromagnetic Nanostructured Materials	Accepted as Invited Talk	David Navas	Instituto de Ciencia de Materiales de Madrid (ICMM-CSIC) Spain
15:45-16:15	Fine tuning of magnetic properties and Giant Magnetoimpedance effect in multilayered microwires	Accepted as Invited Talk	Ricardo Lopez Anton	University of Castilla-La Mancha Spain
16:15-16:30	**Coffee Break**			
Session Moderators: Ivan Skorvanek & Ricardo Lopez-Anton				
16:30-17:00	Ni-Fe-Ga based Glass-Coated Microwires for Microactuators	Accepted as Invited Talk	Rastislav Varga	RVmagnetics a.s. Slovakia
17:00-17:20	Role of buffer layers in Co/Pt multilayers with perpendicular magnetic anisotropy	Accepted as Invited Talk	Jose Maria Porro	Ikerbasque & BCMaterials Spain
17:20-17:40	Engineering hybrid ferrite nanostructures for permanent magnets	Accepted as Invited Talk	Pierfrancesco Maltoni	University of Genoa; CNR-ISM Italy
17:40-18:00	Magnetic structure of amorphous Fe/Co-rich glass-coated microwires in external magnetic fields	Accepted as Invited Talk	Sergey Gudoshnikov	National University of Science and Technology «MISiS», Russia

HALL 3 - Yunus Emre 1

Atomic-level engineering of novel magnetic and superconducting states

HALL 3 - Yunus Emre 1	09:30	Co-organizers: Roland Wiesendanger

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Roland Wiesendanger & Balazs Ujfalussy				
09:30-10:00	Surprises with Majorana Zero Modes	Accepted as Invited Talk	Stephan Rachel	University of Melbourne Australia
10:00-10:30	Quantifying YSR excitations in transverse magnetic field using BCS superconductors near the 2D limit	Accepted as Invited Talk	Alexander Khajetoorians	Radboud University, Institute for molecules and materials Netherlands
10:30-11:00	Yu-Shiba-Rusinov States in Atomically Designed Magnetic Clusters on Superconductors	Accepted as Invited Talk	Levente Rózsa	HUN-REN Wigner Research Centre for Physics Hungary
11:00-11:15	**Coffee Break**			
Session Moderators: Roland Wiesendanger & Balazs Ujfalussy				
11:15-11:45	New Frontiers in Topological Quantum Matter	Accepted as Keynote Talk	M ZAHID Hasan	Princeton University USA
11:45-12:15	Two-dimensional topological superconductivity driven by atomic scale spin textures	Accepted as Invited Talk	Roberto Lo Conte	Zernike Institute for Advanced Materials, Universiy of Groningen Netherlands
12:15-12:45	The Interplay of Stripe-like Charge orders, Electronic	Accepted as Invited Talk	Wei Li	Department of Physics, Tsinghua University

Time	Title	Status	Author	Affiliation/Country
	Correlation and Majorana Bound States in 2M-WS2			China
12:45-14:00	**Lunch**			
14:00-14:45	**Half-Plenary Talk Hall 1 & Hall 2**			
Session Moderators: Roland Wiesendanger & Bernd Büchner				
14:45-15:15	Hybridizing Machida-Shibata states	Accepted as Invited Talk	Posske Thore	Universität Hamburg Germany
15:15-15:45	Majorana Zero Modes in magnetic chain on overlayer systems	Accepted as Contributed Talk	Balazs Ujfalussy	HUN-REN Wigner Research Centre for Physics Hungary
15:45-16:15	Real-Space Mapping of Individual Electronic Transitions using Transmission Electron Microscopy	Accepted as Contributed Talk	Stefan Löffler	TU Wien / USTEM Austria

Superconductivity and Topology in PtBi2

HALL 3 - Yunus Emre 1 | **16:30** | **Co-organizers: Bernd Büchner**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Balazs Ujfalussy & Bernd Büchner				
16:30-17:00	Nonlinear optical responses in the topological material PtBi2	Accepted as Invited Talk	Jingbo Qi	University of Electronic Science and Technology of China China

Time	Title	Status	Author	Affiliation/Country
17:00-17:30	Observation of nodal superconductivity on the Fermi arcs of PtBi2	Accepted as Invited Talk	Susmita Changdar	IFW Dresden Germany
17:30-18:00	Dissipationless transport signature of topological nodal lines	Accepted as Invited Talk	Dufouleur Joseph	IFW Dresden Germany

HALL 4 - Yunus Emre 2

Curvilinear and 3D Nanoarchitectures for Superconductivity and Magnetism

HALL 4 - Yunus Emre 2 | **09:30** | **Co-organizers: Vladimir Fomin & Denys Makarov**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Denys Makarov & Huali Yang				
09:30-10:00	Controlling polarization by curvature in free standing complex oxide membranes	Accepted as Keynote Talk	Thomas Jespersen	Technical University of Denmark, Denmark
10:00-10:30	First Principles Modelling of Curvilinear and Flexomagnetism in 2D Magnets	Accepted as Keynote Talk	Alexander Edström	KTH Royal Institute of Technology Sweden
10:30-11:00	3D Hollow nanostructures: a new playground for curvilinear magnetism	Accepted as Keynote Talk	Davide Peddis	Università di Genova Italy
11:00-11:15	**Coffee Break**			

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Thomas Mühl & Claas Abert				
11:15-11:45	Experimental Study of Curved 30 nm Cylindrical Iron Nanowires	Accepted as Keynote Talk	Thomas Mühl	IFW Dresden Germany
11:45-12:15	Mechanical Regulation of the Magnetic Properties of Flexible Magnetic Thin Films	Accepted as Keynote Talk	Huali Yang	Ningbo Institute of Materials Technology and Engineering, Chinese Academy of Sciences China
12:15-12:45	A Template-Mediated Versatile Way for Creating Curvilinear and 3D Nanoarchitectures	Accepted as Keynote Talk	Rui Xu	Helmholtz-Zentrum Dresden-Rossendorf (HZ Germany
12:45-14:00	**Lunch**			
14:00-14:45	**Half-Plenary Talk Hall 1 & Hall 2**			
Session Moderators: Elina Zhakina & Alejandro Silhanek				
14:45-15:15	Electronic materials with nanoscale curved geometries	Accepted as Keynote Talk	Paola Gentile	CNR - Institute for SuPerconductors, INnovative materials, and devices (SPIN) Italy
15:15-15:45	Bending-Strain Effects in Superconducting Spintronics	Accepted as Keynote Talk	Sol Jacobsen	Norwegian University of Science and Technology Norway
15:45-16:15	Hybrid Josephson Junctions and Nanodevices Based on Micro-Crystals and FIBID-Grown Superconductors	Accepted as Keynote Talk	JOSE DE TERESA	CSIC-UNIVERSITY OF ZARAGOZA Spain
16:15-16:30	**Coffee Break**			

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Anna Palau & Michael Huth				
16:30-17:00	Magneto-transport and anomalous Hall effect in nanostructured superconductor/ferromagnet hybrids	Accepted as Keynote Talk	Mariela Menghini	IMDEA Nanociencia Spain
17:00-17:20	Magnetic Recording of Superconducting States	Accepted as Invited Talk	Alejandro Silhanek	Université de Liège Belgium
17:20-17:40	3D Nanoarchitectures for Fluxonics and Magnonics	Accepted as Invited Talk	Oleksandr Dobrovolskiy	Technische Universität Braunschweig Germany
17:40-18:00	Superconducting properties of Fe/Au/Nb heterostructures form first principles	Accepted as Invited Talk	Balazs Ujfalussy	HUN-REN Wigner Research Centre for Physics Hungary

HALL 5 - Aristo

Device Physics of Josephson Junctions and Their Fundamental Technologies

HALL 5 - Aristo | **09:30** | **Co-organizers: Yılmaz Simsek & Olcay Kızılaslan**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Sachio Komori & Olcay Kizilaslan				
09:30-10:00	Investigation of structural properties of nano-patterns created by focused He-ion-beam irradiation of YBa2Cu3O7 thin films	Accepted as Invited Talk	Edward Goldobin	University of Tübingen Germany

Time	Title	Status	Author	Affiliation/Country
10:00-10:30	The Influence of Flux on AQFP Circuits for A Double-Active-Layered Niobium Fabrication Process	Accepted as Invited Talk	Lieze Schindler	Stellenbosch University & SUN Magnetics South Africa
10:30-11:00	Ferromagnetic and Ferroelectric Control of Superconductivity for Energy-Efficient and Size-Scalable Electronics	Accepted as Invited Talk	Sachio Komori	Nagoya University Japan
11:00-11:15	**Coffee Break**			
Session Moderators: Edward Goldobin & Yılmaz Simsek				
11:15-11:45	Superconducting comparator as high-speed analog frontend for microwave signals	Accepted as Invited Talk	Thomas Ortlepp	CiS Forschungsinstitut für Mikrosensorik GmbH Germany
11:45-12:05	Highly Sensitive Magnetoresistance-Superconducting-Soft-magnetic Composite Magnetic Sensor	Accepted as Contributed Talk	Yue Wu	INSTITUTE OF ELECTRICAL ENGINEERING,CHINESE ACADEMY OF SCIENCES China
12:05-12:25	Controlled spiking behaviour of a superconducting NbTiN neuron	Accepted as Contributed Talk	Zain Alzoubi	King Fahd University of Petroleum and Minerals Saudi Arabia

Advances in Current-Induced Magnetization Control

HALL 5 - Aristo | **14:45** | **Co-organizers: Can Onur Avcı**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Tamalika Banerjee & Can Onur Avci				
14:45-15:15	Controlling and Imaging Spin Waves in 3D	Accepted as Keynote Talk	Daniela Petti	Politecnico di Milano Italy
15:15-15:45	Exploring Proximity Effects in Tailored van der Waals Heterostructures	Accepted as Invited Talk	Juan F. Sierra	ICN2 Spain
15:45-16:15	Efficient charge-to-spin conversion and long spin lifetime in chiral crystals	Accepted as Invited Talk	Jagoda Slawinska	University of Groningen Netherlands
16:15-16:30	**Coffee Break**			
Session Moderators: Christian Rinaldi & Lijun Zhu				
16:30-17:00	Magnetoelectric order in Antiferromagnetic SrMnO3 Thin Films	Accepted as Invited Talk	Tamalika Banerjee	University of Groningen Netherlands
17:00-17:20	Unconventional electronic transport of spin textures	Accepted as Invited Talk	Gunasheel kauwtilyaa Krishnaswamy	National University of Singapore Singapore
17:20-17:40	Generation and detection of spin current in iridate/manganite heterostructures	Accepted as Contributed Talk	Gennady Ovsyannikov	Kotelnikov IRE RAS Russia
17:40-18:00	Zinc vacancy induced room temperature ferromagnetism in Zn1-yLiyO(0.00<y<0.08) thin films synthesized by Pulse Laser Deposition	Accepted as Contributed Talk	SAIF-Ullah Awan	National University of Sciences and Technology (NUST) Pakistan

HALL 6 - Eflatun

Quantum emission and defects in solid state materials

HALL 6 - Eflatun	09:30	Co-organizers: Jonathan Pelliciari & Gabriele Grosso

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Jonathan Pelliciari & Vladimir Dyakonov				
09:30-10:00	Underlying mechanisms of single photon emission in defective hexagonal boron nitride	Accepted as Invited Talk	Gabriele Grosso	CUNY Advanced Science Research Center USA
10:00-10:30	Quantum Emission from Coupled Spin Pairs in Hexagonal Boron Nitride	Accepted as Invited Talk	Adam Gali	HUN-REN Wigner Research Centre for Physics Hungary
10:30-11:00	Excited State Properties of Point Defects in Semiconductors Investigated with Time-Dependent Density Functional Theory and Quantum Embedding Methods	Accepted as Invited Talk	Marco Govoni	University of Modena and Reggio Emilia Italy
11:00-11:15	**Coffee Break**			
Session Moderators: Gabriele Grosso & Adam Gali				
11:15-11:45	Optically Addressable Spin Defects in hexagonal Boron Nitride	Accepted as Invited Talk	Vladimir Dyakonov	Julius-Maximilian University of Würzburg Germany
11:45-12:15	Elementary excitations in quantum emitters of hBN	Accepted as Invited Talk	Jonathan Pelliciari	Brookhaven National Laboratory USA
12:15-12:35	Generation of Quantum Emitters by Introducing Color Centers inside Diamond	Accepted as Contributed Talk	Sevil Irmak Şentürk	TÜBİTAK National Metrology Institute (TÜBİTAK UME) Türkiye

Electronic Orders and Excitations in Quantum Materials by REIXS (Resonant Elastic & Inelastic X-ray Scattering)

HALL 6 - Eflatun | **14:45** | **Co-organizers: Jonathan Pelliciari & Valentina Bisogni & Claudio Mazzoli**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Claudio Mazzoli & Flavio Capotondi				
14:45-15:15	Resonant small-angle x-ray scattering in vector fields applied to anisotropic magnetic systems	Accepted as Invited Talk	Victor Ukleev	Helmholtz-Zentrum Berlin für Materialien und Energie Germany
15:15-15:45	Interplay of magnetic textures and CDW in skyrmion hosts intermetallic Eu based compounds	Accepted as Invited Talk	Alessandro Bombardi	Diamond Light Source United Kingdom
15:45-16:15	X-ray Scattering Perspective on the Electronic Structure, Magnetism and Superconductivity of RuO2	Accepted as Invited Talk	Connor Occhialini	Columbia University USA
16:15-16:30	**Coffee Break**			
Session Moderators: Jonathan Pelliciari & Thorsten Schmitt				
16:30-16:45	Electronic charge modulations: their ubiquity and relevance in cuprates and nickelates HTSC	Accepted as Invited Talk	Claudio Mazzoli	Brookhaven National Lab USA
16:45-17:15	Following spin dynamics using free electron laser radiation	Accepted as Invited Talk	Flavio Capotondi	Elettra - Sincrotrone Triesye Italy

HALL 7 - Hipokrat

Superconductors Under Extreme Conditions of Pressure and Strain

HALL 7 - Hipokrat	09:30	Co-organizers: Rustem Khasanov & Alexander Shengelaya

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Alexander Shengelaya & Rustem Khasanov				
09:30-10:00	How pressure affects cuprate properties measured by NMR	Accepted as Invited Talk	Juergen Haase	Felix Bloch Institute for Solid State Physics, Leipzig University Germany
10:00-10:30	Search for thermodynamic evidence for broken time-reversal symmetry superconducting phase transition under uniaxial strain in Sr2RuO4 using μSR	Accepted as Invited Talk	Vadim Grinenko	Tsung-Dao Lee Institute, SJTU China
10:30-11:00	Pressure induced superconductivity in polymorphs of RhBi2	Accepted as Invited Talk	Sergey Medvedev	Max-Planck-Institute for Chemical Physics of Solids Germany
11:00-11:15	**Coffee Break**			
Session Moderators: Juris Purans & Vadim Ksenofontov				
11:15-11:45	Mass renormalisation and superconductivity in quantum materials	Accepted as Invited Talk	Malte Grosche	University of Cambridge United Kingdom
11:45-12:15	Large Fermi surface in pristine kagome metal CsV3Sb5 revealed by quantum oscillations under pressure	Accepted as Invited Talk	Swee Goh	The Chinese University of Hong Kong China

Time	Title	Status	Author	Affiliation/Country
12:15-12:45	Pressure and strain investigations of uranium-based materials	Accepted as Invited Talk	Eteri Svanidze	Max Planck Institute for Chemical Physics of Solids Germany
12:45-14:00	**Lunch**			
14:00-14:45	**Half-Plenary Talk Hall 1 & Hall 2**			
Session Moderators: Vadim Grinenko & Eteri Svanidze				
14:45-15:15	Can one perform (or understand) magnetic measurements in a diamond anvil pressure cell?	Accepted as Invited Talk	Sergey Bud'ko	Ames Laboratory and Department of Physics and Astronomy, Iowa State University USA
15:15-15:35	Pressure effect on the coupling strengths in elemental In and Sn superconductors	Accepted as Contributed Talk	Rustem Khasanov	Laboratory for Muon Spin Spectroscopy, Paul Scherrer Institute, Switzerland
15:35-15:55	Anisotropic Strain Effects on Superconductivity and Stripe Order in a Cuprate	Accepted as Contributed Talk	Zurab Guguchia	Laboratory for Muon Spin Spectroscopy, Paul Scherrer Institute Switzerland
15:55-16:15	Superconductivity in high entropy compounds	Accepted as Contributed Talk	Fang Hong	Institute of Physics, Chinese Academy of Sciences China
16:15-16:30	**Coffee Break**			
Session Moderators: Juergen Haase & Zurab Guguchia				
16:30-17:00	Synchrotron Radiation XAFS Analysis of Local Structures in Strongly Anharmonic Systems	Accepted as Invited Talk	Juris Purans	Institute of Solid State Physics University of Latvia Latvia

Time	Title	Status	Author	Affiliation/Country
17:00-17:20	Pressure-Tuned Magnetism and Bandgap Modulation in Van der Waals Layered Materials	Accepted as Invited Talk	Mahmoud Abdel-Hafiez	University of Sharjah United Arab Emirates
17:20-17:50	Trapped magnetic moment in superconducting H3S	Accepted as Contributed Talk	Vadim Ksenofontov	Max Planck Institute for Chemistry Germany
17:50-18:10	Pressure-Sensitive Multiple Superconducting Phases and Their Structural Origin in Van der Waals HfS2 Up to 160 GPa	Accepted as Contributed Talk	Binbin Yue	Center for High Pressure Science & Technology Advanced Research China

HALL 8 - İbn-i Sina

From disorder to metastability and hidden phases in 2D quantum materials

HALL 8 - İbn-i Sina | **09:30** | **Co-organizers: Emil Bozin & Nenad Lazarević**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Emil Bozin & Mazhar Ali				
09:30-10:00	Ultrafast Structural Reconfiguration, Induced by Metastable Electronic Reordering in the Transition Metal Dichalcogenide	Accepted as Invited Talk	Igor Vaskivskyi	Jozef Stefan Institute Slovenia
10:00-10:30	Short-Range Correlations With Long-Range Implications: The Influence of Local Magnetic Structure in Quantum Materials	Accepted as Invited Talk	Benjamin Frandsen	Brigham Young University USA

Time	Title	Status	Author	Affiliation/Country
10:30-11:00	Spin, charge, and lattice excitations in Fe(Se:S)	Accepted as Invited Talk	Nenad Lazarevic	Institute of Physics Belgrade Serbia
11:00-11:15	**Coffee Break**			
Session Moderators: Jelena Pesic & Igor Vaskivskiy				
11:15-11:45	The Josephson Diode Effect with 2D Kagome Mott Insulators Nb3X8 (X = Cl, Br, I)	Accepted as Invited Talk	Mazhar Ali	Delft University of Technology, Kavli Institute of Nanoscience Delft Netherlands
11:45-12:15	Role of Disorder in Wigner-Mott Transitions	Accepted as Invited Talk	Vladimir Dobrosavljevic	Florida State University and NHMFL USA
12:15-12:45	Role of impurities in hidden states of superconducting iron chalcogenides	Accepted as Invited Talk	Qiang Li	Stony Brook University USA
12:45-14:00	**Lunch**			
14:00-14:45	**Half-Plenary Talk Hall 1 & Hall 2**			
Session Moderators: Nenad Lazarevic & Dragana Popovic				
14:45-15:15	Site and orbital selective states from predictive power of the embedded dynamical mean field theory (eDMFT) in correlated materials	Accepted as Invited Talk	Gheorghe Pascut	Stefan Cel Mare University (USV) of Suceava Romania
15:15-15:45	Hidden Local Symmetry Breaking as a Route to Ultralow Thermal Conductivity	Accepted as Invited Talk	Emil Bozin	Institute of Physics Belgrade Serbia
15:45-16:15	Hierarchical Charge Density Waves in Kagome Metals	Accepted as Invited Talk	Sun-Woo Kim	University of Cambridge United Kingdom

Time	Title	Status	Author	Affiliation/Country
16:15-16:30	**Coffee Break**			
Session Moderators: Bojana Visic & Vladimir Dobrosavljevic				
16:30-17:00	Nonequilibrium Transport and Thermalization in Two-Dimensional Bad Conductors	Accepted as Invited Talk	Dragana Popovic	National High Magnetic Field Laboratory, Florida State University USA
17:00-17:20	Avoided metallicity in a hole-doped Mott insulator on a triangular lattice	Accepted as Contributed Talk	Chi Ming Yim	Tsung Dao Lee Institute, Shanghai Jiao Tong University China

HALL 9 - Halide Edib Adıvar

Micromagnetics and Modeling

HALL 9 - Halide Edib Adıvar | **09:30** | **Co-organizers: Claas Abert & Sabri Koraltan**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Claas Abert & Mateusz Gołębiewski				
09:30-10:00	Physics aware extreme learning for computational micromagnetism	Accepted as Invited Talk	Lukas Exl	Wolfgang Pauli Institute, University of Vienna Austria
10:00-10:20	Computational Studies of Novel Dzyaloshinsky-Moriya Interactions	Accepted as Invited Talk	Samuel Holt	Max Planck Institute for the Structure and Dynamics of Matter Germany
10:20-10:40	Symmetry-adapted normal-mode calculations of spin waves with TetraX.2	Accepted as Invited Talk	Lukas Körber	Radboud University Nijmegen Netherlands

Time	Title	Status	Author	Affiliation/Country
10:40-11:00	Advanced Micromagnetic Methods for Spin-Wave Transducer Optimization	Accepted as Invited Talk	Florian Bruckner	University of Vienna Austria
11:00-11:15	**Coffee Break**			
Session Moderators: Claas Abert & Xiangrong Wang				
11:15-11:45	Normal Modes Model for Micromagnetic Analysis and Simulation	Accepted as Invited Talk	Massimiliano d'Aquino	Department of Electrical Engineering and ICT, University of Naples Federico II Italy
11:45-12:05	New surface localization mechanism of FMR modes in 3D nanostructures	Accepted as Invited Talk	Mateusz Gołębiewski	Adam Mickiewicz University, Institute of Spintronics and Quantum Information, Faculty of Physics an Poland
12:05-12:25	Efficient Simulation Models for Permanent Magnets with Non-Homogeneous Magnetization	Accepted as Invited Talk	Florian Slanovc	Silicon Austria Labs (SAL) Austria
12:25-12:45	The Compared Effect of 4-Coiled System in Pulsed Electromagnetic Field Stimulation Treatment	Accepted as Invited Talk	Tarık Yazar	Ankara University, Turkiye Türkiye
12:45-14:00	**Lunch**			
14:00-14:45	**Half-Plenary Talk Hall 1 & Hall 2**			
Session Moderators: Sabri Koraltan & Claas Abert				
14:45-15:15	Steady State Detection of the Uniformly Excited Spin Waves in Rectangular Microstrips Using PCA	Accepted as Invited Talk	Santa Pile	University for Continuing Education Krems Austria

Time	Title	Status	Author	Affiliation/Country
15:15-15:35	A Theory for Unidirectional Magnetoresistance in Nanoscale Bilayers	Accepted as Invited Talk	Xiangrong Wang	The Chinese University of Hong Kong, Shenzhen and The Hong Kong University of Science and Technology China
15:35-15:55	Tailoring 2D MXene-Based Memory Devices for Enhanced Resistive Switching and Multi-Level Data Storage	Accepted as Invited Talk	Syed Rizwan	Department of Physics & Astronomy, School of Natural Sciences, National University of Sciences and T Pakistan

Nonadiabatic Dynamics in Materials

HALL 9 - Halide Edib Adıvar | **16:30** | **Andrey Vasenko & Jian Liu & Run Long**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Andrey Vasenko & Dongyu Liu				
16:30-17:00	Spin Valley Dynamics Entangled with Optical Fields, Phonons, and Spin-orbit Coupling in Monolayer MoSe2	Accepted as Invited Talk	Jin Zhao	University of Science and Technology of China China
17:00-17:20	Nonadiabatic Field: A Conceptually New Approach for Nonadiabatic Transition Dynamics	Accepted as Invited Talk	JIAN LIU	Peking University China
17:20-17:40	Merging static and dynamic strategies for computing excited state decay rate constants	Accepted as Invited Talk	Daniel Escudero	KU Leuven Belgium
17:40-18:00	Nonadiabatic Dynamics, Time-resolved Spectra and Machine Learnings	Accepted as Invited Talk	Zhenggang Lan	South China Normal University China

FOYER

Poster Session

FOYER | **18:15** | **Mustafa Akdoğan & Haluk Koralay & Özgür Öztürk & Javier Campo until 19:45**

Time	Title	Status	Author	Affiliation/Country
18:15-18:30	Thermal properties of Nd0.5Ca0.5MnO3, Nd0.5Sr0.5MnO3 and Pr0.5Ca0.5MnO3 at high temperatures	Accepted as Poster Presentation	Sakin Jabarov	Institute of Physics of Ministry of Science and Education of the Republic of Azerbaijan Azerbaijan
18:30-18:45	FREQUENCY-DEPENDENT CAPACITANCE IN GRAPHENE-BASED POLYURETHANE COMPOSITES	Accepted as Poster Presentation	Özgür ÖZTÜRK	Kastamonu University Arts and Science Faculty Department of Physics Türkiye
18:45-19:00	Preparation and performance of high-temperature superconducting MgB2 wire	Accepted as Poster Presentation	Hongli Hou	Northwest Institute For Non-ferrous Metal Research. China
19:00-19:00	Characteristics of Nanostructured FeCrC Powders Made by Ball Milling Structural and Physical	Accepted as Poster Presentation	MALIK ATOUT	Ecole nationale supérieure des technologies avancées Algeria
19:00-19:00	Frequency dependencies of impedance in TmxMn1−xS	Accepted as Poster Presentation	Anton Kharkov	Siberian State Aerospace University after academican M. F. Reshetnev Russia
19:00-19:00	Past and Future Perspective of Tl-1212 Superconductor	Accepted as Poster Presentation	Efil Yusrianto	1. Universitas Islam Negeri Imam Bonjol Padang Indonesia
19:00-19:00	The Magnetic State of Ni-Mn based Ferromagnetic Shape Memory Alloys at Low Temperatures	Accepted as Poster Presentation	Gökhan KIRAT	INONU UNIVERSITY Türkiye
19:00-19:00	Computational Investigation of the Influence of Non-Magnetic Defects on the Magnetic Properties of Super-Cell of Transition Metal Alloys	Accepted as Poster Presentation	Abdalla Obeidat	Jordan University of Science and Technology Jordan

Time	Title	Status	Author	Affiliation/Country
19:00-19:00	Advanced On-Chip Synthesis and Application of Magnetic Core-Shell Nanoparticles and Aerogels for Pollution Mitigation	Accepted as Poster Presentation	Grumezescu Alexandru Mihai	National University of Science and Technology POLITEHNICA Bucharest Romania
19:00-19:00	Novel 3D-printed microfluidic platform tested for the production of nanocomposites used in water decontamination applications	Accepted as Poster Presentation	Adelina-Gabriela Niculescu	National University of Science and Technology POLITEHNICA Bucharest Romania
19:00-19:00	Aerogel Magnetic Nanoparticle Synthesis Using Microfluidic Devices for Healthcare and Environmental Applications	Accepted as Poster Presentation	Grumezescu Alexandru Mihai	National University of Science and Technology POLITEHNICA Bucharest Romania
19:00-19:00	Optimization of Magnetic Nanoparticle Synthesis Using Microfluidic Devices	Accepted as Poster Presentation	Adelina-Gabriela Niculescu	National University of Science and Technology POLITEHNICA Bucharest Romania
19:00-19:00	Tuning Garnet Properties: The Role of Cr Substitution in $Sm_3Fe_5O_{12}$	Accepted as Poster Presentation	Shalini Verma	IIT Guwahati India
19:00-19:00	A micro-whirls model and unsolved problems of superconductivity	Accepted as Poster Presentation	Vladimir Kozhevnikov	Tulsa Community College; KU Leuven USA
19:00-19:00	Reconfigurable Magnetic Defects in Square Artificial Spin Ice	Accepted as Poster Presentation	Zixiong Yuan	Nanjing University China
19:00-19:15	The effect of MWCNTs and strontium ferrite nanoparticles on the structural and electromagnetic performance of cellulose-based carbon aerogel composites	Accepted as Poster Presentation	Ali Ghasemi	Isfahan science and Technology Town, Isfahan, Iran Iran
19:15-19:15	Magnetic Properties of FeCr Nanowires: Influence of Chromium Concentration on FORC Diagrams and Magnetization Reversal Mechanisms	Accepted as Poster Presentation	Ali Ghasemi	Isfahan science and Technology Town, Isfahan, Iran Iran

Time	Title	Status	Author	Affiliation/Country
19:15-19:15	Variable Timestep Implementation in JoSIM-Pro Using an ODE-Based Simulation Method	Accepted as Poster Presentation	Johannes Delport	Stellenbosch University & SUN Magnetics South Africa
19:15-19:15	Field Induced Phase transitions in 2D vdW Antiferromagnet	Accepted as Poster Presentation	Sreelakshmi Nair	PhD Scholar India
19:15-19:15	Spontaneous magnetism in superconductors from first-principles	Accepted as Poster Presentation	Balazs Ujfalussy	HUN-REN Wigner Research Centre for Physics Hungary
19:15-19:15	The excess conductivity and thermoelectric power of Bi2Sr2Ca0.6Zn0.4Cu2Oy	Accepted as Poster Presentation	Sadiyar Ragimov	Baku State University Azerbaijan
19:15-19:15	Structural and Electrical properties of Sm doped Zinc Magnese Cobalt Ferrites.	Accepted as Poster Presentation	Haroon Mazhar	COMSATS University Islamabad, Islamabad. Pakistan
19:15-19:15	Effect of magnetic impurity Mn on the conductivity of the Bi0.9Sb0.1 solid solution	Accepted as Poster Presentation	Sadiyar Ragimov	Baku State University Azerbaijan
19:15-19:15	New approach for the characterization of high temperature superconductors using the Bean model	Accepted as Poster Presentation	Juan Rojas	Student Colombia
19:15-19:15	Dual nonlinear dielectric resonance of Al-doped ZnO nanoparticles in the X-Band	Accepted as Poster Presentation	Bita Azemoodeh Afshar	author Iran
19:15-19:15	CORRELATION BETWEEN DOPING LEVEL AND SUPERCONDUCTING CRITICAL TEMPERATURE OF La-DOPED Bi-2201	Accepted as Poster Presentation	Abdullo Ahadov	Bukhara State University Uzbekistan
19:15-19:15	Study of Structural & Dielectric Properties Nd doped (Ca-Bi) Cobaltites Using Sol-gel Method.	Accepted as Poster Presentation	Haris Kiani	Applied Thermal Physics Laboratory, COMSATS University Islamabad, Pakistan
19:15-19:15	Exploring the Synergetic Effects of Fe3O4 with Tunable Graphene Oxide Content for Enhanced Supercapacitor Performance	Accepted as Poster Presentation	Samia Sadaqat Hussain	Rawalpindi Women University, Pakistan Pakistan

Time	Title	Status	Author	Affiliation/Country
19:15-19:15	Exchange-Driven Spin Ordering in the Spin Glass Interlayer at the YIG (100) and GGG Interface	Accepted as Poster Presentation	Umesh Chandra Thuwal	Research Scholar, IIT Kanpur India
19:15-19:15	The Influence of Doping Ferromagnetic Elements Fe and Co on the Complex Permittivity, Dielectric Loss, and Magnetization of NiO	Accepted as Poster Presentation	Farzaneh Asaldoust	Department of Physics, Faculty of Sciences, Urmia University, Urmia, Iran Iran
19:15-19:15	Examining the Impact of Doping Ferromagnetic Elements Ni and Co on the Properties of Fe3O4 Nanoparticles	Accepted as Poster Presentation	Pari Soltanpour	Department of Physics, Faculty of Sciences, Urmia University, Urmia, Iran Iran
19:15-19:15	Influence of Rare Earth Ions on the Transport Properties of (Zn-Co) Ferrites for Emerging Technologies	Accepted as Poster Presentation	Muhammad Anis-ur-Rehman	COMSATS University Islamabad, Islamabad, Pakistan Pakistan
19:15-19:15	Impact of Cobalt Doping on Electrical Properties of Mn-Zn Ferrites for Electronics Applications	Accepted as Poster Presentation	Muhammad Anis-ur-Rehman	COMSATS University Islamabad, Islamabad, Pakistan Pakistan
19:15-19:15	Frequency and Temperature-dependent Electrical and Structural Properties of Ga3+doped Cobalt Ferrites	Accepted as Poster Presentation	Muhammad Anis-ur-Rehman	COMSATS University Islamabad, Islamabad, Pakistan Pakistan
19:15-19:15	A study on AC conductivity and dielectric properties of Manganese based transition metal oxide Nanoparticles	Accepted as Poster Presentation	Romaisa Fatima	Applied Thermal Physics Laboratory, Department of Physics COMSATS University Islamabad Pakistan
19:15-19:15	Investigation of magnetic characteristic of Mn, and Zn doped NiFe2O4 ferrite NPs	Accepted as Poster Presentation	Nasrin Nazari	Department of Physics, Faculty of Sciences, Urmia University, Urmia, Iran Iran
19:15-19:15	Spin pumping from canted antiferromagnets	Accepted as Poster Presentation	Elizaveta Kozlova	IRE RAS Russia
19:15-19:15	Study of Spin-Orbit Torques in Ni80Fe20/Pt(t)/Co Asymmetric Trilayer	Accepted as Poster Presentation	Shilpa Samdani	Nanyang Technological University, Singapore Singapore

Time	Title	Status	Author	Affiliation/Country
19:15-19:15	Influence of Nd3+ Substitution on Structural, Dielectric and Electrical Properties of Cobalt-Gadolinium Ferrite	Accepted as Poster Presentation	Haroon Mazhar	COMSATS University Islamabad, Islamabad. Pakistan
19:15-19:15	Facile synthesis, optical and electrical characterization of copper, cobalt and co-doped magnesium oxide nanoparticles	Accepted as Poster Presentation	Ghulam Asghar	University of Poonch Rawalakot AJK Pakistan Pakistan
19:15-19:15	Magnon-polaritons in magnetic heterostructure with magnetic (ferromagnetic and antiferromagnetic) layered superlattices with graphene sheets at the interfaces	Accepted as Poster Presentation	Rehile Askerbeyli	Karabuk University Türkiye
19:15-19:15	Advanced Supercapacitor Applications: Electrodes with a Novel Hierarchical Polymer/Metal Oxide and MXene Heterostructure	Accepted as Poster Presentation	Alvena Shahid	Lahore College for Women University Lahore Pakistan
19:15-19:15	Dielectric behavior of PVP/PVA and RE-doped Cobalt Ferrite Embedded Fibers	Accepted as Poster Presentation	Sehrish Gul-e-Rana	COMSATS University Islamabad Pakistan
19:15-19:15	Effect of exchange-correlation functional on the ground state, magnetic and electronic properties of the Fe-Ga alloys: Ab Initio investigations	Accepted as Poster Presentation	Mikhail Zagrebin	Chelyabinsk State University Russia
19:15-19:15	Synthesis of MgB2 films on Hastelloy-C276 tape through magnetron sputtering in co-evaporation mode	Accepted as Poster Presentation	Ruslan Batulin	Kazan Federal University Russia
19:15-19:15	Analysis on Arc Suppressing Characteristics of Induction Motor due to Driving Current Limiting Operation of SFCL in a Power Distribution System	Accepted as Poster Presentation	Sung-Hun Lim	Soongsil University South Korea
19:15-19:15	Analysis on Fault Current Limiting Characteristics of Three-Phase Transformer Type SFCL using Two SCMs According to Three-Phase Ground Faults	Accepted as Poster Presentation	Sung-Hun Lim	Soongsil University South Korea
19:15-19:30	Mass of Charge Carrier in the YBCO from Bipolaronic Model	Accepted as Poster	Bakhram Yavidov	Nukus State Pedagogical Institute

Time	Title	Status	Author	Affiliation/Country
		Presentation		named after Ajiniyaz Uzbekistan
19:30-19:30	A Study on Thermally Activated Flux Flow of Welded TSMG YBCO Produced with NdBCO/YBCO/MgO Thin Film Seed	Accepted as Poster Presentation	Kübra BATUR	Karadeniz Technical University, Physics Türkiye
19:30-19:30	Resistivity Anomalies and Intrinsic Spin-Orbit Coupling in Superconducting Thin Film Solid Solutions of Nb1−xUx for 0.15 <x<0.40	Accepted as Poster Presentation	Syed Akbar Hussain	University of Bristol United Kingdom
19:30-19:45	Understanding Quantum Mechanics And Technology Without Math	Accepted as Poster Presentation	Aytan Aghasiyeva	Azerbaijani Azerbaijan
19:45-19:45	The Effect of Changing the Nano Size and Crystal Spacing on the Energy Gap and Other Optical and Electrical Properties of BaxFe(1-x)TiO4 Perovskite Cells and Their Theoretical Relations	Accepted as Poster Presentation	Zoalnoon zsaad	King Khalid University Saudi Arabia
19:45-19:45	Dielectric Properties of Lanthanum and Samarium Doped Cobalt Ferrite	Accepted as Poster Presentation	Sehrish Gul-E-Rana	COMSATS University Islamabad Pakistan
19:45-19:45	Structural, and transport properties of double perovskite Bi2Ca2-xLaxCoO6, ceramics synthesized by co-precipitation method	Accepted as Poster Presentation	Yasir Abbas	COMSATS UNIVERSITY ISLAMABAD Pakistan
19:45-19:45	Exploration of Weak Anti-Localization in Antiferromagnetic Single Crystalline MnSn2	Accepted as Poster Presentation	Vishnu Kumar Tiwari	Ph.D. scholar IIT Kanpur India
19:45-19:45	Optimizing wet-etching processes for the fabrication of High-Temperature nanostructures	Accepted as Poster Presentation	Huidong li	INSTITUT DE CIÈNCIA DE MATERIALS DE BARCELONA Spain
19:45-20:00	Ultrafast quantum dynamics driven by the strong space-charge field of a relativistic electron beam	Accepted as Poster Presentation	Alexey Kartsev	HSE University Russia

Time	Title	Status	Author	Affiliation/Country
20:00-20:15	Stability of the magnetocaloric effect in La1-xPrxFe13.7Si1.3(Hδ) alloys under long-term exposure to the cyclic magnetic fields	Accepted as Poster Presentation	Nurizhat Abdulkadirova	Amirkhanov Institute of Physics of DFRC of RAS Russia

Presentations

Tuesday, April 29th, 2025

Previous Day Next Day

Presentations

Wednesday, April 30th, 2025

Previous Day | Next Day

Sessions by Room

Room Name	Session Name	Start Time
HALL 1 - Mevlana 1	Plenary	08:30:00
	Cryogenics Materials, Engineering and Applications	09:30:00
	Hydrogen Enabling Technology for Superconductors	11:15:00
HALL 2 - Mevlana 2	Cryogenic magnonics	09:30:00
HALL 3 - Yunus Emre 1	MgB2 – Materials and Applications	09:30:00
HALL 4 - Yunus Emre 2	Curvilinear and 3D Nanoarchitectures for Superconductivity and Magnetism	09:30:00
HALL 5 - Aristo	Computing/Sensing with Imperfect Quantum Hardware	09:30:00
HALL 6 - Eflatun	Theory of Magnetism	09:30:00
	Electronic Orders and Excitations in Quantum Materials by REIXS (Resonant Elastic & Inelastic X-ray Scattering)	11:15:00
HALL 7 - Hipokrat	High Temperature Superconductors for fusion applications	09:30:00
HALL 8 - İbn-i Sina	Bulk Superconductors	09:30:00
HALL 9 - Halide Edib Adıvar	Nonadiabatic Dynamics in Materials	09:30:00

HALL 1 - Mevlana 1

Plenary

HALL 1 - Mevlana 1	08:30	Sastry Pamidi & Yasuharu Kamioka

Time	Title	Status	Author	Affiliation/Country
08:30-09:15	Isochronous Proton Cyclotron SC230 with a Cryogen-free Superconducting Magnet	Accepted as Plenary Talk	Yuta Ebara	Sumitomo Heavy Industries, Ltd., Japan Japan
09:15-19:00				
19:00-21:00	**Dinner**			
21:00-23:00	**Panel Discussion**			

Cryogenics Materials, Engineering and Applications

HALL 1 - Mevlana 1	09:30	Co-organizers: Yasuharu Kamioka

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Yasuharu Kamioka & Bartek Glowacki				
09:30-10:00	Cooling Performances of 25T and 33T Cryogen-free Superconducting Magnets	Accepted as Keynote Talk	Satoshi Awaji	Tohoku University Japan
10:00-10:30	Screening-current induced stresses in no-insulation REBCO coils for high-field HTS magnet and HTS cyclotron applications	Accepted as Invited Talk	Hiroshi Ueda	Okayama University Japan

Time	Title	Status	Author	Affiliation/Country
10:30-10:50	Voltage-tunable Resistive States in Superconductor-Ferromagnet Heterostructures for Cryogenic Memory and Neuromorphic Applications	Accepted as Contributed Talk	Thomas Günkel	ICMAB-CSIC Spain
10:50-11:05	Cryogenic Temperature Effects on RF Performance for Quantum Device Characterization	Accepted as Contributed Talk	İbrahim Ünver	TUBITAK National Metrology Institute, UME Türkiye

Hydrogen Enabling Technology for Superconductors

HALL 1 - Mevlana 1 | **11:15** | **Co-organizers: Zeliha Ertekin & German Francisco de la Fuente & Bartek Andrzej Glowacki**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Satoshi Awaji & Hiroshi Ueda				
11:15-11:45	Numerical and Theoretical Analyses of Losses in Armature Windings of HTS Motors for Liquid Hydrogen Pumps	Accepted as Invited Talk	Kazuhiro Kajikawa	Sanyo-Onoda City University Japan
11:45-12:15	Development of High-Temperature Superconducting Generators Cooled by Liquid Hydrogen	Accepted as Invited Talk	Masayoshi Ohya	Kwansei Gakuin University Japan
12:15-12:45	Energy applications of metallic and oxide superconductors enabled by Hydrogen cryomagnetics	Accepted as Invited Talk	Bartek Glowacki	Department of Materials Science and Metallurgy, University of Cambridge United Kingdom

HALL 2 - Mevlana 2

Cryogenic magnonics

HALL 2 - Mevlana 2	09:30	Co-organizers: Oleksandr Dobrovolskiy

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Oleksandr Dobrovolskiy & Sebastian Knauer				
09:30-10:00	Fluxon Dynamics in Superconductor/Ferromagnet Hybrids: Fast Behavior in NbRe/Py Hybrids.	Accepted as Keynote Talk	Carmine Attanasio	Dipartimento di Fisica University of Salerno Italy
10:00-10:20	Magnesium diboride-based thin films for cryogenic spintronics	Accepted as Invited Talk	Thomas Hauet	Institut Jean Lamour, Université de Lorraine-CNRS France
10:20-10:40	Laser engineered architectures for magnetic flux manipulation on superconducting Nb thin films	Accepted as Invited Talk	Nicolas Lejeune	Department of Physics - University of Liège - Belgium Belgium
10:40-11:00	Control of magnetic configuration and spin-wave dynamics in magnonic-superconducting hybrids (corrected)	Accepted as Invited Talk	Yuliia Kharlan	Adam Mickiewicz University, Faculty of Physics and Astronomy Poland
11:00-11:15	**Coffee Break**			
Session Moderators: Oleksandr Dobrovolskiy & Thomas Hauet				
11:15-11:45	Phase-coherent dynamics of Bose–Einstein condensate of magnons	Accepted as Keynote Talk	Alexander (Oleksandr) Serga (Serha)	University of Kaiserslautern-Landau Germany
11:45-12:05	Hybrid Opto-Magnonic and All-Electrical Propagating Spin-Wave Spectroscopy at Millikelvin Temperatures	Accepted as Invited Talk	Sebastian Knauer	Faculty of Physics, University of Vienna Austria
12:05-12:25	Magnon Lifetime and Transport in YIG at Millikelvin Temperatures	Accepted as Invited Talk	Rostyslav Serha	University of Vienna Austria

Time	Title	Status	Author	Affiliation/Country
12:25-12:45	Investigation of Mode-Induced Spin Wave Transmission Blockage by In Situ Nanoscale Grooves	Accepted as Contributed Talk	Cyril Delforge	Université de Liège Belgium

HALL 3 - Yunus Emre 1

MgB2 – Materials and Applications

HALL 3 - Yunus Emre 1 | **09:30** | **Co-organizers: Hiroaki Kumakura / Daniel Gajda & Burcu Savaşkan**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Petre Badica & Burcu Savaşkan				
09:30-10:00	Ultrafine Superconducting Wires and Flexible Cables	Accepted as Invited Talk	Akihiro Kikuchi	National Institute for Materials Science Japan
10:00-10:30	Kinetics Mechanism on the Efficiency of C Substituting B in the MgB2 Tape Fabrication	Accepted as Invited Talk	Dongliang Wang	Institute of ELectrical Engineering, Chinese Academy of Sciences China
10:30-10:50	Recent development of of MgB2 supercongducting wires in NIN	Accepted as Invited Talk	Shengnan Zhang	Northwest Institute for Non-ferrous Metal Research China
10:50-11:05	Influence of Reaction Kinetics on MgB2 Wires with Enhanced Properties: Optimization of Copper-Coated Magnesium Rod and Carbon-Coated Nano-Boron Powders in IMD Process	Accepted as Contributed Talk	Ali Gencer	Ankara University Türkiye
11:05-11:20	Microwave Characterization of MgB2 Superconducting Wires	Accepted as Contributed Talk	Doğan AVCI	National Metrology Institute, TÜBİTAK Türkiye

Time	Title	Status	Author	Affiliation/Country
11:20-11:35	**Coffee Break**			
Session Moderators: Daniel Gajda & Akihiro Kikuchi				
11:35-12:05	The role of MgB2 in the Future Sustainable Economy	Accepted as Invited Talk	Petre Badica	National Institute of Materials Physics Romania
12:05-12:25	Study of the morphology of Sm2O3 doped MgB2 wires by using the transmission electron microscope	Accepted as Invited Talk	Daniel Gajda	Institute of Low Temperature and Structure Research, Polish Academy of Sciences (PAS) Poland
12:25-12:45	High Performance Internal Mg Diffusion (IMD) MgB2 Wire Fabricated by Carbonized Glucose Coated B Powder	Accepted as Contributed Talk	Chen Guo	Chinese Academy of Sciences, Institute of Electrical Engineering China
12:45-13:05	Investigation of joint of in-situ MgB2/Fe wires by magnetic induction and modeling of the magnetic induction system with FEM.	Accepted as Contributed Talk	Mustafa Akdogan	Abant Izzet Baysal University Türkiye

HALL 4 - Yunus Emre 2

Curvilinear and 3D Nanoarchitectures for Superconductivity and Magnetism

HALL 4 - Yunus Emre 2 | **09:30** | **Co-organizers: Vladimir Fomin & Denys Makarov**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Vladimir Fomin & Denys Makarov				

Time	Title	Status	Author	Affiliation/Country
09:30-10:00	Dirac Quantum Hall States on (Reciprocal) Curved Surfaces	Accepted as Keynote Talk	Maximilian Fürst	University of Regensburg Germany
10:00-10:30	3D Magnetic Solitons in Chiral Magnets	Accepted as Keynote Talk	Nikolai Kiselev	Forschungszentrum Jülich Germany
10:30-11:00	Engineering Spin Orientation and Transport in Magnetic Quantum Point Contacts to Graphene	Accepted as Keynote Talk	Ivan Vera Marun	The University of Manchester United Kingdom
11:00-11:15	**Coffee Break**			
Session Moderators: Nikolai Kiselev & Ivan Vera Marun				
11:15-11:45	Scanning SQUID microscopy of 2D magnetism	Accepted as Invited Talk	Boris Gross	University of Basel Switzerland
11:45-12:05	Van der Waals magnets as the natural platform for studies of two-dimensional magnetism	Accepted as Invited Talk	Vladislav Kataev	Leibniz Institute for Solid State and Materials Research Dresden Germany
12:05-12:25	Topological and Ferrotoroidal Magnetic Textures in 3D Nanoarchitectures	Accepted as Invited Talk	Oleksandr Pylypovskyi	Helmholtz-Zentrum Dresden-Rossendorf e.V. Germany
12:25-12:45	Combining Ginzburg-Landau with Micromagnetics in 3D Geometries	Accepted as Invited Talk	Philipp Rybakov	Uppsala University Sweden

HALL 5 - Aristo

Computing/Sensing with Imperfect Quantum Hardware

HALL 5 - Aristo	09:30	Co-organizers: Irfan Siddiqi

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Irfan Siddiqi & Akel Hashim				
09:30-10:00	Passive two-photon dissipation for bit-flip error correction of a cat code	Accepted as Invited Talk	Benjamin Huard Huard	Ecole Normale Superieure de Lyon France
10:00-10:30	Deployable quantum sensors based on spins driven far-from-equilibrium	Accepted as Invited Talk	Ashok Ajoy	University of California, Berkeley, USA USA
10:30-11:00	High-Coherence Kerr-Cat Qubit in 2D Architecture	Accepted as Invited Talk	Ahmed Hajr	UC Berkeley USA
11:00-11:15	**Coffee Break**			
Session Moderators: Ashok Ajoy & Benjamin Huard				
11:15-11:45	Noise Tailoring for Quantum Error Correction	Accepted as Invited Talk	Akel Hashim	Lawrence Berkeley National Lab USA
11:45-12:05	Protected Symmetrical Superconducting Qubit Based on Quantum Flux Parametron	Accepted as Invited Talk	Mehdi Fardmanesh	Sharif University of Technology Iran
12:05-12:25	Generation of Autonomous Quantum Resources by Dissipative Quantum Systems	Accepted as Contributed Talk	Tomáš Novotný	Department of Condensed Matter Physics, Faculty of Mathematics and Physics, Charles University in Pr Czech Republic
12:25-12:45	Josephson junction based weak microwave detector	Accepted as Contributed Talk	Nazif Orhun Tekci	TOBB University of Economics and Technology Türkiye

HALL 6 - Eflatun

Theory of Magnetism

HALL 6 - Eflatun	09:30	Co-organizers: Ali Zaoui

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Ali Zaoui & Jonathan Pelliciari				
09:30-10:00	Unconventional magnetism	Accepted as Invited Talk	Qihang Liu	Southern University of Science and Technology China
10:00-10:30	Magnetic space groups and Spin-Group symmetry in Magnetic Materials	Accepted as Contributed Talk	Xiangang Wan	Nanjing University China
10:30-11:00	Electronic structure and magnetic properties of FeRhAs1-xZx (Z= Si, P, Sb, Al, Ga, In) alloys: ab initio study	Accepted as Contributed Talk	Oksana Pavlukhina	Chelyabinsk State University Russia

Electronic Orders and Excitations in Quantum Materials by REIXS (Resonant Elastic & Inelastic X-ray Scattering)

HALL 6 - Eflatun	11:15	Co-organizers: Jonathan Pelliciari & Valentina Bisogni & Claudio Mazzoli

Time	Title	Status	Author	Affiliation/Country
Session Moderator: Qihang Liu & Claudio Mazzoli				
11:15-11:45	Magnetic excitations beyond the single- and double- magnons	Accepted as Invited Talk	Hebatalla Elnaggar	Sorbonne University France
11:45-12:15	Emergence of Interfacial Magnetism in Strongly-Correlated Nickelate-Titanate Superlattices	Accepted as Invited Talk	Thorsten Schmitt	Paul Scherrer Institut Switzerland

Time	Title	Status	Author	Affiliation/Country
12:15-12:45	POLARON DYNAMICS ACROSS THE PHOTO-INDUCED 'HIDDEN' PHASE IN La2/3Ca1/3MnO3	Accepted as Contributed Talk	Jonathan Pelliciari	Brookhaven National Laboratory USA

HALL 7 - Hipokrat

High Temperature Superconductors for fusion applications

HALL 7 - Hipokrat | **09:30** | **Co-organizers: Ziad Melhem & Arno Godeke**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Changhao Hu & Ziad Melhem				
09:30-10:00	Advances in High-field Superconducting Magnet for Next Generation Fusion Reactor in China	Accepted as Invited Talk	JINXING ZHENG	Institute of Plasma Physics, Chinese Academy of Sciences China
10:00-10:30	R&D gaps and opportunities to mature HTS conductor and fusion magnet technology	Accepted as Invited Talk	Yuhu Zhai	Princeton Plasma Physics Laboratory USA
10:30-11:00	What R&D in HTS wire and magnet do we need for the industrialization of HTS-compact fusion?	Accepted as Invited Talk	Yutaka Yamada	Shanghai Supreconductor Tech./ Chubu University Japan
11:00-11:15	**Coffee Break**			
Session Moderators: Arno Godeke & Yuhu Zhai				
11:15-11:45	A Novel Finite Model for REBCO CORC-CICC	Accepted as Invited Talk	Changhao Hu	Huazhong University of Science and Technology

Time	Title	Status	Author	Affiliation/Country
	Cables			China
11:45-12:05	Design and Analysis of BEST PF Magnets	Accepted as Contributed Talk	Xufeng Liu	Institute of plasma physics, Chinese Academy of Sciences China
12:05-12:25	Application of a 3D Local Sub-modeling Approach in the Mechanical Analysis of the CFETR Toroidal Field Magnet	Accepted as Contributed Talk	Jun Ni	Institute of Plasma Physics, Chinese Academy of Sciences China
12:25-12:45	Thermal Processing Deformation Simulation and Experimental Analysis of CRAFT TF High-Field Coil	Accepted as Contributed Talk	Yifei Wu	Hefei Institutes of Physical Science, Chinese Academy of Sciences, Hefei 230031, China, and the Un China

HALL 8 - İbn-i Sina

Bulk Superconductors

HALL 8 - İbn-i Sina | **09:30** | **Co-organizers: S. Barış Güner & Kévin Berger**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: S. Barış Güner & Alexander Shengelaya				
09:30-10:00	Penetration Properties of Superconductors. New Results on an Old Problem.	Accepted as Invited Talk	Vladimir Kozhevnikov	Tulsa Community College; KU Leuven USA
10:00-10:30	Magnetic Screening Using Superconducting Bulks and Coated Conductors: the Road to Scalability	Accepted as Invited Talk	Nicolas Rotheudt	University of Liège, Belgium Belgium
10:30-10:50	High Tc of Tl2Ba2CaCu2O8 Superconductor at Low Pressure	Accepted as Contributed Talk	Efil Yusrianto	1. Universitas Islam Negeri Imam Bonjol Padang Indonesia

Time	Title	Status	Author	Affiliation/Country
10:50-11:10	Universal low-temperature fluctuation of unconventional superconductors revealed	Accepted as Contributed Talk	Wei Ku	Shanghai Jiao Tong University China
11:10-11:20	**Coffee Break**			
Session Moderators: Kévin Berger & Vladimir Kozhevnikov				
11:20-11:50	Ultrafast Synthesis and Sintering of High-Temperature Superconductors by Light Irradiation	Accepted as Invited Talk	Alexander Shengelaya	Department of Physics, Ivane Javakhishvili Tbilisi State University Georgia
11:50-12:10	Microscopic investigation of an equiatomic hexagonal high entropy alloy Nb-Mo-Ru-Re-Ir using μSR technique	Accepted as Contributed Talk	Sonika Jangid	Indian Institute of Science Education and Research Bhopal, India India
12:10-12:30	Observation of quantum vortex core fractionalization and skyrmion formation in superconductor	Accepted as Contributed Talk	Quanxin Hu	Tsung-Dao Lee Institute, Shanghai Jiao Tong University China
12:30-12:50	Effects of CeO_2 and Y211 Additions on the Magnetic Levitation Force of YBCO Single Crystals	Accepted as Contributed Talk	Sait Guner	Recep Tayyip Erdoğan University Türkiye

HALL 9 - Halide Edib Adıvar

Nonadiabatic Dynamics in Materials

HALL 9 - Halide Edib Adıvar | **09:30** | **Co-organizers: Andrey Vasenko & Jian Liu & Run Long**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Wenjian Liu & Daniel Escudero				
09:30-10:00	Nonadiabatic Molecular Dynamics of Nanoscale Systems with Machine Learning	Accepted as Keynote Talk	Oleg Prezhdo	University of Southern California USA
10:00-10:20	Path integral approach for dynamics of small quantum systems coupled to a continuum	Accepted as Contributed Talk	Alexei Vagov	HSE Research University Russia
10:20-10:40	Breaking the Size Limitation of Non-Adiabatic Molecular Dynamics in Condensed Matter Systems with Local Descriptor Machine Learning	Accepted as Invited Talk	Dongyu Liu	MIEM, HSE University Russia
10:40-11:00	Schottky Defects Suppress Nonradiative Recombination in CH3NH3PbI3 through Charge Localization	Accepted as Invited Talk	Andrey Vasenko	HSE University Russia
11:00-11:15	**Coffee Break**			
Session Moderators: Jian Liu & Jin Zhao				
11:15-11:45	TD-DFT for Nonadiabatic Couplings	Accepted as Keynote Talk	Wenjian Liu	Shandong University China
11:45-12:15	Non-Adiabatic Effects Get into Thermophysical Properties	Accepted as Invited Talk	Yu Zhai	Peking University China
12:15-12:45	Nonadiabatic semi-classical Langevin molecular dynamics	Accepted as Invited Talk	Jing-Tao Lu	Huazhong University of Science and Technology China

Presentations

Wednesday, April 30th, 2025

Previous Day Next Day

Presentations

Thursday, May 1st, 2025

Previous Day | Next Day

Sessions by Room

Room Name	Session Name	Start Time
HALL 1 - Mevlana 1	Plenary	08:30:00
	Half-Plenary 1	14:00:00
	Large Scale Applications of Superconductors and Their Fundamental Technologies	09:30:00
HALL 2 - Mevlana 2	Half-Plenary 2	14:00:00
	Nonuniform Magnetic Textures: Vortices, Skyrmions and Hopfions	09:30:00
HALL 3 - Yunus Emre 1	Magnetic Shape Memory Alloys and Magnetocalorics	09:30:00
HALL 4 - Yunus Emre 2	HTS Cuprates: Advances in Fundamentals and Experimental Studies	09:30:00
	Multicomponent Superconductivity and Related Phenomena	14:45:00
HALL 5 - Aristo	Superconducting Base Elements for Artificial Neural Networks and Quantum Circuits	09:30:00
	Self-Organization and Transport in Bio-inspired Active Magnetic Colloids	16:30:00
HALL 6 - Eflatun	Vortex Dynamics in Superconducting Patterned Structures and Devices: Simulation, Experiment, and Imaging	09:30:00
	Superconductivity and Topology in PtBi2	16:30:00
HALL 7 - Hipokrat	Advances in Nickelate Superconductors	09:30:00
HALL 8 - İbn-i Sina	Quantum Information Technology and Applications	09:30:00

	Quantum Functional Materials and Their Emerging Technologies	14:45:00
HALL 9 - Halide Edib Adıvar	Magnetic Materials Processing and Physical Properties	09:30:00
	Magnetism of Nanoparticles, Nano-Wires and Nano-Structures	16:30:00

HALL 1 - Mevlana 1

Plenary

HALL 1 - Mevlana 1 | **08:30** | **Moderators: Vadim Grinenko & Shiv Singh & Ramamoorthy Ramesh & Victor Laliena**

Time	Title	Status	Author	Affiliation/Country
Vadim Grinenko & Shiv Singh				
08:30-09:15	Higher-order electron condensates in multicomponent superconductors	Accepted as Plenary Talk	Ilaria Maccari	ETH Switzerland
09:15-18:15				
Ramamoorthy Ramesh & Victor Laliena				
18:15-19:00	3D printing of magnetic and superconducting nanostructures: a new platform to investigate three-dimensional effects at the nanoscale	Accepted as Plenary Talk	Amalio Fernandez-Pacheco	TU Wien, Austria Austria
19:00-23:00	**Gala Dinner**			

Half-Plenary 1

HALL 1 - Mevlana 1	14:00	Alexander Chernyshev & Hyunsoo Yang

Time	Title	Status	Author	Affiliation/Country
14:00-14:40	Lattice Effects in Spin-Orbit Entangled Quantum Magnets	Accepted as Half-Plenary Talk	Giniyat Khaliullin	Max Planck Institute for Solid State Research Germany

Large Scale Applications of Superconductors and Their Fundamental Technologies

HALL 1 - Mevlana 1	09:30	Co-organizers: Arno Godeke

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Arno Godeke & Alexandre Colle				
09:30-10:00	Development of a Superconducting Rotating Gantry and Synchrotron for Heavy-Ion Radiotherapy	Accepted as Keynote Talk	Shigeki Takayama	Toshiba Energy Systems & Solutions Corporation Japan
10:00-10:30	US Accelerator Magnet R&D to Enable Future Energy Frontier Colliders	Accepted as Invited Talk	Soren Prestemon	Lawrence Berkeley National Laboratory USA
10:30-11:00	Superconducting detector magnets for particle physics experiments	Accepted as Invited Talk	Matthias Mentink	CERN France
11:00-11:15	**Coffee Break**			

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Arno Godeke & Alexander Otto				
11:15-11:45	Development of a Cryogenic and Superconducting Powertrain for Electric Aircraft Propulsion at Airbus UpNext	Accepted as Keynote Talk	COLLE Alexandre	Airbus UpNext France
11:45-12:15	Large Offshore Wind Power Generators Suitable for Green Hydrogen Production	Accepted as Invited Talk	Grant Lumsden	Victoria University Wellington New Zealand
12:15-12:35	Rapid AC losses modeling in superconducting coils made of HTS Tapes	Accepted as Contributed Talk	Hocine Menana	University of Lorraine, Research Group in Electrical Engineering of Nancy (GREEN) France
12:35-12:55	A Universal Framework for Exact Magnetic Field Design Regardless of the Source	Accepted as Contributed Talk	Jaume Cunill-Subiranas	Universitat Autònoma de Barcelona Spain
12:55-14:00	**Lunch**			
14:00-14:45	**Half-Plenary Talk Hall 1 & Hall 2**			
Session Moderators: Arno Godeke & Luis Garcia-Tabares				
14:45-15:15	Large Scale AC and Fast-Ramp Applications with New HTS Conductors and Coils	Accepted as Keynote Talk	Alexander Otto	Solid Material Solutions LLC USA
15:15-15:45	Recent characterizations of SCSC cables	Accepted as Invited Talk	Naoyuki Amemiya	Kyoto University Japan
15:45-16:15	Progress of the superconducting cables project in Paris: SuperRail	Accepted as Invited Talk	Kévin Berger	Université de Lorraine - GREEN France

Time	Title	Status	Author	Affiliation/Country
16:15-16:30	**Coffee Break**			
Session Moderators: Arno Godeke & Alexander Otto				
16:30-17:00	Superconductivity at Sea: Large Scale Realizations for Waterborne Transportation and Other Oceanic Applications	Accepted as Keynote Talk	Luis Garcia-Tabares	CIEMAT Spain
17:00-17:30	Quench Protection of HTS Coils Wound with Electrically Insulated Wires -To protect magnets from quench damage-	Accepted as Invited Talk	Osami Tsukamoto	Yokohama National University Japan
17:30-17:50	Appliance of High Temperature Superconductors for Dry High-Field Magnets with A Large Aperture	Accepted as Contributed Talk	Daria Kolomentseva	SJSC SuperOx Russia
17:50-18:10	Compact and Affordable Particle Therapy with High Temperature Superconductors	Accepted as Contributed Talk	Arno Godeke	Compact PT Netherlands

HALL 2 - Mevlana 2

Half-Plenary 2

HALL 2 - Mevlana 2	**14:00**	**Sabri Koraltan & Amalio Fernandez-Pacheco**

Time	Title	Status	Author	Affiliation/Country
14:00-14:40	Magnetic Insulators in Spintronics: Emerging Opportunities and Persistent Challenges	Accepted as Half-Plenary Talk	Can Onur AVCI	Institute of Materials Science of Barcelona (ICMAB-CSIC) Spain

Nonuniform Magnetic Textures: Vortices, Skyrmions and Hopfions

HALL 2 - Mevlana 2 | **09:30** | **Co-organizers: Sabri Koraltan & Sebastian Wintz**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Emily Darwin & Mona Bhukta				
09:30-10:00	Accurate measurements for a precise control of the Dzyaloshinskii-Moriya interaction	Accepted as Keynote Talk	Michaela Kuepferling	Istituto Nazionale di Ricerca Metrologica (INRiM) Italy
10:00-10:30	Spin-wave excitations of the real-space magnetic topology in the Kondo-lattice magnets	Accepted as Invited Talk	Masahito Mochizuki	Waseda University Japan
10:30-11:00	Noncollinear Magnetic Structure in FeRu Bcc Films	Accepted as Invited Talk	Erol Girt	Simon Fraser University Canada
11:00-11:15	**Coffee Break**			
Session Moderators: Emily Darwin & Sabri Koraltan				
11:15-11:45	Understanding and Controlling the Ultrafast Emergence of a Skymrion Phase	Accepted as Keynote Talk	Bastian Pfau	Max Born Institute Germany
11:45-12:15	Magnetic Force Microscopy of Skyrmions in Biased Ferromagnetic and	Accepted as Invited Talk	Emily Darwin	Empa Switzerland

Time	Title	Status	Author	Affiliation/Country
	Antiferromagnetic Coupled Multilayers			
12:15-12:45	Antiferromagnetic Topological Quasiparticles in Synthetic Antiferromagnets: Skyrmions, Bimerons, and Beyond	Accepted as Invited Talk	Mona Bhukta	Johannes Gutenberg University of Mainz Germany
12:45-14:00	**Lunch**			
14:00-14:45	**Half-Plenary Talk Hall 1 & Hall 2**			
Session Moderators: Sebastian Wintz & Yizhou Liu				
14:45-15:15	Femtosecond microscopy reveals ultrafast spin dynamics at magnetic domain walls	Accepted as Invited Talk	Sergey Zayko	Max Planck Institute for Multidisciplinary Sciences Germany
15:15-15:45	Observations of Bubble Dynamics in a Magnetic Insulator via Time-Resolved Scanning Transmission X-ray microscopy	Accepted as Invited Talk	Ping Che	Laboratoire Albert Fert, CNRS, Thales, Université Paris-Saclay France
15:45-16:15	Skyrmions in multilayer MTJs and their spin-torque diode effect	Accepted as Invited Talk	Riccardo Tomasello	Politecnico di Bari Italy
16:15-16:30	**Coffee Break**			
Session Moderators: Sebastian Wintz & Bastian Pfau				
16:30-17:00	Electrical creation and manipulation of a magnetic hopfion	Accepted as Invited Talk	Yizhou Liu	High Magnetic Field Laboratory, Hefei Institute of Physical Sciences, CAS China
17:00-17:30	Spin Resonance Spectroscopy meets Transmission Electron Microscopy	Accepted as Contributed Talk	Philipp Haslinger	Technische Universität Wien - Atominstitut - USTEM Austria

HALL 3 - Yunus Emre 1

Magnetic Shape Memory Alloys and Magnetocalorics

HALL 3 - Yunus Emre 1	09:30	Co-organizers: Volodymyr Chernenko & Arkady Zhukov & Jose María Porro

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Arcady Zhukov & Akio Kimura				
09:30-10:00	The role of transformation entropy on the caloric properties of FSMAs	Accepted as Invited Talk	Concepcio Segui	Physics Deartment, University Balearic Islands Spain
10:00-10:30	Impact of Partial Chemical Disorder on the Ground State Properties of Magnetocaloric Heusler Alloys	Accepted as Invited Talk	Vladimir Sokolovskiy	Chelyabinsk State University Russia
10:30-11:00	Caloric Properties of Cr2Ge2Te6 Van Der Waals Ferromagnet	Accepted as Invited Talk	Enric Stern-Taulats	Universitat de Barcelona Spain
11:00-11:15	**Coffee Break**			
Session Moderators: Jose María Porro & Concepció Seguí				
11:15-11:45	Neutron Diffraction Insights into Magnetic Shape Memory Alloys and Magnetocalorics	Accepted as Invited Talk	J. Alberto Rodriguez Velamazan	Institut Laue Langevin France
11:45-12:15	Exploring “real” electronic structures of Heusler Metamagnetic Shape Memory Alloys	Accepted as Invited Talk	Akio Kimura	Hiroshima University Japan

Time	Title	Status	Author	Affiliation/Country
12:15-12:45	Probing the giant magnetocaloric effect near magneto-structural phase transition using neutron diffraction	Accepted as Invited Talk	Sagar Ghorai	Technical University of Darmstadt, Germany Germany
12:45-14:00	**Lunch**			
14:00-14:45	**Half-Plenary Talk Hall 1 & Hall 2**			
Session Moderators: Volodymyr Chernenko & Enric Stern-Taulats				
14:45-15:15	Effect of heat treatments on martensitic transformation behavior of Mn-Ni-Sn(Fe) metamagnetic shape memory ribbons and powders	Accepted as Invited Talk	David Mérida Sanz	Universidad del País Vasco/Euskal Herriko Unibertsitatea Spain
15:15-15:45	Preparation and characterization of thin microwires from Heusler alloys	Accepted as Invited Talk	Arcady Zhukov	Dept. Polymers and Adv. Mater., UPV/EHU Spain
15:45-16:15	Power Generation by Resonant Self-Actuation of a Thermomagnetic Film	Accepted as Invited Talk	Joel Joseph	Karlsruhe Institute of Technology Germany
16:15-16:30	**Coffee Break**			
Session Moderators: Joel Joseph & David Mérida Sanz				
16:30-17:00	The Impact of Itinerant Electron Metamagnetism and Hydrogenation on the Phase Transition in La(FexSi1-x)13-based Magnetocaloric Materials	Accepted as Invited Talk	Markus Gruner	University of Duisburg-Essen Germany
17:00-17:30	Giant inverse magnetocaloric effect in Ni-Co-Mn-Ti alloys: stability of the inverse effect	Accepted as Invited Talk	Adler Gamzatov	Amirkhanov Institute of Physics, Daghestan Federal Research Centre, Russian

Time	Title	Status	Author	Affiliation/Country
	in cyclic magnetic fields up to 8 T			Academy of Sciences Russia
17:30-18:00	Study of d0-d Half-Heusler Alloys (Be, Ba)ScZ (Z = Al, Ga, In, Si, Ge, Sn, Pb, P, As, Sb, Bi, S, Se, Te)	Accepted as Invited Talk	Mariya Matyunina	Chelybinsk State University Russia

HALL 4 - Yunus Emre 2

HTS Cuprates: Advances in Fundamentals and Experimental Studies

HALL 4 - Yunus Emre 2 | **09:30** | **Co-organizers: Davor Pavuna & Neven Barisic**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Atsushi Fujimori & Gediminas Simutis				
09:30-10:00	High-Tc Cuprates and Murunskite – The Importance of Very Local Interactions	Accepted as Keynote Talk	Neven Barisic	TU Wien and PMF Zagreb Austria
10:00-10:20	Planckian scaling behavior in overdoped Bi2Sr2CaCu2O8+d	Accepted as Invited Talk	Jungseek Hwang	Sungkyunkwan University South Korea
10:20-10:40	Possible measurable manifestations of the Q-ball mechanism of superconductivity in the strange metal phase of high-Tc cuprates	Accepted as Invited Talk	Sergei Mukhin	National university of science and technology MISIS Russia
10:40-11:00	Sublattice interference and Fermi arcs in cuprates	Accepted as Invited Talk	Keun Su Kim	Yonsei University South Korea
11:00-11:15	**Coffee Break**			

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Neven Barisic & Sergei Mukhin				
11:15-11:45	Signatures of electron fractionalization in electron-doped cuprates	Accepted as Keynote Talk	Atsushi Fujimori	Department of Physics, National Tsing Hua University Taiwan
11:45-12:05	Uniaxial Control of Cuprate Superconductors	Accepted as Invited Talk	Gediminas Simutis	Laboratory for Neutron and Muon Instrumentation Switzerland
12:05-12:25	ARPES Studies on the Origin of the High Temperature Superconductivity in Quadruple-Layered Cuprate (Cu, C) $Ba_2Ca_3Cu_4O_{11+\delta}$	Accepted as Contributed Talk	Haichao Xu	Fudan University China
12:25-12:45	Crystal Symmetry Effects on Oxygen dopants Distribution, Superconductivity and Phase Diagram In $YBa_2Cu_3O_7$	Accepted as Contributed Talk	Bassam M. Mustafa	Mosul University Retired Iraq

Multicomponent Superconductivity and Related Phenomena

HALL 4 - Yunus Emre 2 | **14:45** | **Co-organizers: Vadim Grinenko & Egor Babaev & Hans-Henning Klauss**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Ilaria Maccari & Fan Yang				
14:45-15:15	Un-quantized Vortex and Edge Fields in Multicomponent Superconductors	Accepted as Invited Talk	Yusuke Iguchi	Geballe Laboratory for Advanced Materials, Stanford University USA
15:15-15:45	Saddle point driven charge density wave on the surface of heavily hole doped iron arsenide superconductors	Accepted as Invited Talk	Chi Ming Yim	Tsung Dao Lee Institute, Shanghai Jiao Tong University China

Time	Title	Status	Author	Affiliation/Country
15:45-16:15	Dome-Shaped Superconducting Phase Diagram Linked to Charge Order in LaRu3Si2	Accepted as Invited Talk	Petr Král	PSI Center for Neutron and Muon Sciences Switzerland
16:15-16:30	**Coffee Break**			
Session Moderators: Yusuke Iguchi & Vadim Grinenko				
16:30-17:00	Vestigial Phases Originating From Partially Melting of Multi-Component Superconductivities in the Quasicrystals	Accepted as Invited Talk	Fan Yang	Beijing Institute of Technology China
17:00-17:20	Quantum Fluctuation-driven Nematic Superfluidity of a Multi-condensate Bose Liquid: Realization in 2H-NbSe2	Accepted as Invited Talk	Wei Ku	Shanghai Jiao Tong University China
17:20-17:40	Integer and fractional vortices driving new physics in multicomponent superconductors: the case of magic-angle twisted bilayer graphene	Accepted as Contributed Talk	Ilaria Maccari	ETH Switzerland
17:40-18:00	Observation of fractionalization of single-quantum vortex in the multi-component Ba1−xKxFe2As2 superconductor	Accepted as Contributed Talk	Qizhi Zhou	Fudan University China

HALL 5 - Aristo

Superconducting Base Elements for Artificial Neural Networks and Quantum Circuits

HALL 5 - Aristo | **09:30** | **Co-organizers: Anatolie Sidorenko & Alexander Golubov**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Alexander Golubov & Ashok Vaseashta				
09:30-10:00	Enhancement of the vortex ratchet effect in superconductor open nanotubes and nanopetals	Accepted as Contributed Talk	Vladimir Fomin	Leibniz Institute for Solid State and Materials Research (IFW) Dresden, Institute for Emerging Elect Germany
10:00-10:20	Proximity effects in superconductor/antiferromagnet heterostructures	Accepted as Invited Talk	Irina Bobkova	Moscow Institute of Physics and Technology Russia
10:20-10:40	Low-dissipative control of magnetization in anomalous phase S/F/S Josephson junctions	Accepted as Invited Talk	Alexander Bobkov	Moscow Institute of Physics and Technology Russia
10:40-11:00	Fundamental Topology and Emergent Applications of the Nanostructured Ferroelectrics	Accepted as Invited Talk	IGOR LUKYANCHUK	University of Picardie France
11:00-11:15	**Coffee Break**			
Session Moderators: Lenar Tagirov & Irina Bobkova				
11:15-11:45	Superconducting spiking neural networks for quantum, adiabatic and neuromorphic computation	Accepted as Invited Talk	Andrey Schegolev	Skobeltsyn Institute of Nuclear Physics Russia
11:45-12:05	Magnetic properties of ludwigites Mn2.25Co0.75BO5 and Mn0.75Co2.25BO5	Accepted as Invited Talk	Rushana Eremina	Zavoisky Physical-Technical Institute, FRC Kazan Scientific Center, Russian Academy of Sciences Russia
12:05-12:25	Asymptotically exact solution for the critical temperature of superconducting F/N/F/S spin-valve	Accepted as Invited Talk	Lenar Tagirov	Zavoisky Physical-Technical Institute of Russian Academy of Sciences Russia

Time	Title	Status	Author	Affiliation/Country
12:25-12:45	Single photon detectors based on superconducting NbRe films	Accepted as Invited Talk	Carla Cirillo	CNR SPIN Salerno Italy
12:45-14:00	**Lunch**			
14:00-14:45	**Half-Plenary Talk Hall 1 & Hall 2**			
Session Moderators: Balazs Ujfaussy & Igor Soloviev				
14:45-15:15	Localization in Materials with Several Conducting Bands to Enhance Superconductivity	Accepted as Keynote Talk	Alexei Vagov	HSE Research University Russia
15:15-15:35	Developing inductorless circuits for Josephson logic and neuromorphic devices	Accepted as Invited Talk	Anastasiia Maksimovskaya	Dukhov All-Russia Research Institute of Automatics, Moscow 101000, Russia Russia
15:35-15:55	Crossover between Types I and II in Diffusive Superconductors: Perturbative Study	Accepted as Invited Talk	Pavel Marychev	HSE University Russia

Self-Organization and Transport in Bio-inspired Active Magnetic Colloids

HALL 5 - Aristo | **16:30** | **Alexey Snezhko & Sofia Kantorovich**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Alexey Snezhko & Alexei Vagov				
16:30-17:00	In-silico investigations of magnetic soft matter	Accepted as Keynote Talk	Sofia Kantorovich	University of Vienna Austria

Time	Title	Status	Author	Affiliation/Country
17:00-17:20	Transport on Structured Surfaces of Magnetoactive Elastomers (MAEs)	Accepted as Invited Talk	Gašper Kokot	JSI / University of Ljubljana Slovenia
17:20-17:40	Simulation of Collective Synchronization in Active Vortex Lattices	Accepted as Invited Talk	Andreas Glatz	Northern Illinois University USA
17:40-18:00	Manipulation of magnetic colloidal swarms	Accepted as Invited Talk	Alexey Snezhko	Argonne National Laboratory USA

HALL 6 - Eflatun

Vortex Dynamics in Superconducting Patterned Structures and Devices: Simulation, Experiment, and Imaging

HALL 6 - Eflatun	09:30	Co-organizers: Andreas Glatz & Milorad Milošević & Boldizsár Jankó

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Boldizsar Janko & Andreas Glatz				
09:30-10:00	Scanning Hall imaging of vortex dynamics in patterned superconducting structures	Accepted as Keynote Talk	Simon Bending	University of Bath United Kingdom
10:00-10:20	Crafting Vortex Pinning Landscapes in Copper-Oxide Superconductors by Focused Helium Ion Irradiation	Accepted as Invited Talk	Bernd Aichner	University of Vienna, Faculty of Physics Austria
10:20-10:40	Intertwined effects of elastic deformation and damage on vortex pinning and Jc degradation in polycrystalline superconductors	Accepted as Invited Talk	Cun Xue	Northwestern Polytechnical University China
10:40-11:00	Nonlinear Conductivity in Superconductor MgB2 Films	Accepted as Invited Talk	Clemens Schmid	University of Vienna Austria

Time	Title	Status	Author	Affiliation/Country
11:00-11:15	**Coffee Break**			
Session Moderators: Andreas Glatz & Boldizsar Janko				
11:15-11:45	Directional Driving of Flux Lines with In-Plane Alternating Magnetic Field in Superconducting Films with Ratchet Thickness Profile	Accepted as Keynote Talk	Alexei Koshelev	University of Notre Dame USA
11:45-12:05	Vortex Ratchet Effect and its Applications in Superconducting Electronic Devices	Accepted as Invited Talk	Boldizsar Janko	University of Notre Dame USA
12:05-12:25	TDGL Simulation of Directed Vortex Dynamics in Anisotropically Patterned Superconductors	Accepted as Invited Talk	Andreas Glatz	Northern Illinois University USA
12:25-12:45	From Microscopic Pinning to Macroscopic Phenomena: A Multiscale Approach to Vortex-Physics	Accepted as Invited Talk	Willa Roland	HES-SO Valais/Wallis Switzerland
12:45-14:00	**Lunch**			
14:00-14:45	**Half-Plenary Talk Hall 1 & Hall 2**			
Session Moderators: Simon Bending & Yong-Lei Wang				
14:45-15:15	Reprogrammable Vortex Dynamics in Superconducting Artificial-Spin-Ice Hybrids: From Frustration to Nonreciprocity	Accepted as Invited Talk	Yong-Lei Wang	Nanjing University China
15:15-15:30	Vortex/Anti-Vortex States in Nano--Patterned Superconducting Films	Accepted as Contributed Talk	Abdulwahab Al Luhaibi	King Fahd University of Petroleum and Minerals Saudi Arabia

Time	Title	Status	Author	Affiliation/Country
15:30-15:45	Dynamics of Vortex Matter in 2D Gapless Superconducting Materials with Impurities	Accepted as Contributed Talk	Valeriia Pashkovskaia	HSE University Russia
15:45-16:00	Flux-flow Instabilities due to Dissociation of Composite Vortices in Two-band Superconductors	Accepted as Contributed Talk	Anton Pokusinskyi	Technische Universität Braunschweig Germany
16:00-16:15	Vortices in superconducting material with a quasicrystal structure	Accepted as Contributed Talk	Andrey Krasavin	HSE University Russia

Superconductivity and Topology in PtBi2

HALL 6 - Eflatun | **16:30** | **Co-organizers: Bernd Büchner**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Simon Bending & Bernd Büchner				
16:30-17:00	Nernst Effect in Superconducting Weyl Semimetal t-PtBi2	Accepted as Invited Talk	Michele Ceccardi	Università degli studi di Genova Italy
17:00-17:30	Enhanced Superconductivity in Topological Semimetal t-PtBi2 Studied by Point Contacts	Accepted as Invited Talk	Oksana Kvitnytska	Institute for Solid State and Materials Research, IFW Dresden Germany
17:30-18:00	Trigonal PtBi2 - Topological Fermi Arcs and Surface Superconductivity	Accepted as Invited Talk	Sebastian Schimmel	Bergische Universität Wuppertal Germany

HALL 7 - Hipokrat

Advances in Nickelate Superconductors

HALL 7 - Hipokrat	09:30	Co-organizers: Meng Wang

Time	Title	Status	Author	Affiliation/Country
Session Moderator: Meng Wang & Jun Zhao				
09:30-10:00	Ambient-Pressure Superconductivity and Electronic Structures in (La,Pr)3Ni2O7 Films	Accepted as Keynote Talk	Zhuoyu Chen	Southern University of Science and Technology China
10:00-10:30	High-Pressure Synthesis of Superconducting Nickelates	Accepted as Invited Talk	Markus Kriener	RIKEN Center for Emergent Matter Science Japan
10:30-11:00	Ambient pressure growth of bilayer nickelate single crystals with superconductivity over 90 K under high pressure	Accepted as Invited Talk	Junjie Zhang	Shandong University China
11:00-11:15	**Coffee Break**			
Session Moderator: Meng Wang & Rustem Khasanov				
11:15-11:45	High-pressure study on the Superconductivity and crystal structures of La3Ni2O7 and Pr4Ni3O10	Accepted as Invited Talk	Hualei Sun	Sun Yat-sen University China
11:45-12:15	Bulk High-Temperature Superconductivity and Density Waves in Layered Nickelates	Accepted as Invited Talk	Rui Zhou	Insititute of Physics, Chinese Academy of Sciences China
12:15-12:45	Theoretical study of bilayer and trilayer nickelate superconductors	Accepted as Invited Talk	Daoxin Yao	Sun Yat-sen University China
12:45-14:00	**Lunch**			

Time	Title	Status	Author	Affiliation/Country
14:00-14:45	**Half-Plenary Talk Hall 1 & Hall 2**			
Session Moderator: Meng Wang & Daoxin Yao				
14:45-15:15	Superconductivity in pressurized trilayer nickelate single crystals	Accepted as Keynote Talk	Jun Zhao	Fudan University China
15:15-15:45	Pressure dependence of the density way transitions in La4Ni3O10	Accepted as Invited Talk	Rustem Khasanov	Laboratory for Muon Spin Spectroscopy, Paul Scherrer Institute, Switzerland
15:45-16:15	A first-principles study of nickelate superconductors	Accepted as Invited Talk	Hanghui Chen	NYU Shanghai and New York University China
16:15-16:30	**Coffee Break**			
Session Moderator: Meng Wang & Markus Kriener				
16:30-17:00	Angle-Resolved Photoemission Spectroscopy Studies on Nickelate Superconductors	Accepted as Invited Talk	Rui Peng	Fudan University China
17:00-17:30	Achieving superconductivity in infinite-layer nickelate thin films by aluminum sputtering deposition	Accepted as Contributed Talk	dongxin zhang	Laboratoire Albert Fert France
17:30-18:00	Low volume fraction of high-Tc superconductivity in La3Ni2O7 at ambient pressure	Accepted as Contributed Talk	Meng Wang	School of Physics, Sun Yat-Sen University China

HALL 8 - İbn-i Sina

Quantum Information Technology and Applications

Co-organizer:

HALL 8 - İbn-i Sina	09:30	Co-organizers: Bartek Andrzej Glowacki & Joanna Skiba-Szymanska

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Bartek Andrzej Glowacki & Parthasarathy Srinivasan				
09:30-10:00	A continuous variable quantum repeater protocol based on cavity-QED	Accepted as Invited Talk	Nicolò Lo Piparo	Okinawa Institute of Science and Technology Japan
10:00-10:20	Topological Superconductivity and Magnetism in Metal/Superconductor Hybrid Systems	Accepted as Contributed Talk	Sayan Banik	National Institute of Science Education and Research India
10:20-10:40	Comparison Between Classical and Quantum Picture of a Josephson Parametric Amplifier	Accepted as Contributed Talk	Emre Küçükyılmaz	TOBB UNIVERSITY OF ECONOMICS AND TECHNOLOGY Türkiye
10:40-11:00	Quantum Computing Applied to Evolutionary Optimization of Electromagnetic Design Problems	Accepted as Contributed Talk	Gabriel Martinez	Politecnico di Milano Italy
11:00-11:15	**Coffee Break**			
Session Moderators: Bartek Andrzej Glowacki & Nicolò Lo Piparo				
11:15-11:45	An Alternate Formulation for computing/validating the Shannon Entropy of Uniform Probability Distributions obtained from Classical (Turing based machines) and Quantum Simulators	Accepted as Invited Talk	Parthasarathy Srinivasan	Beehive Software Solutions , Oracle Corporation USA
11:45-12:05	Predicting Images of Exoplanets Using Quantum Generative Adversarial Networks	Accepted as Contributed Talk	Avaz Naghipour	University College of Nabi Akram Iran
12:05-12:25	Quantum numerical integration	Accepted as Contributed Talk	Alok Shukla	Ahmedabad University India

Quantum Functional Materials and Their Emerging Technologies

HALL 8 - İbn-i Sina	14:45	Co-organizers: Iman Askerzade & Davron Matrasulov

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Iman Askerzade & Bojana Višić				
14:45-15:15	Reduced Description of Open Quantum Systems	Accepted as Invited Talk	Alexandre Zagoskin	Loughborough University United Kingdom
15:15-15:35	Tri-channel spin angular momentum resolution focusing with a bilayer metalens	Accepted as Contributed Talk	Ruhao Pan	Institute of Physics, Chinese Academy of Sciences China
15:35-15:55	Effect of modulation depth onto double resonance spectroscopy of miniaturized atomic clock signal	Accepted as Contributed Talk	seyedeh Mehri Hamidi	Shahid Beheshti University Iran
15:55-16:15	DFT Calculations of Solid-Phase Enthalpy of Formation of Molecular Crystals	Accepted as Contributed Talk	Lixiang Zhong	Beijing Institute of Technology China
16:15-16:30	**Coffee Break**			
Session Moderators: Iman Askerzade & Bojana Višić				
16:30-17:00	Van der Waals nanotubes – optical properties and light-matter interactions	Accepted as Invited Talk	Bojana Višić	Institute of Physics Belgrade Serbia

HALL 9 - Halide Edib Adıvar

Magnetic Materials Processing and Physical Properties

HALL 9 - Halide Edib Adıvar	09:30	Co-organizers: Mehmet Ali Aksan & Özgür Öztürk

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Mehmet Ali Aksan & Jacek Ćwik				
09:30-10:00	Electronic Structure of All-d-Metal Ni(-Co)-Mn-Ti vs. p-d Ni2MnSn: Insights from DFT and XAS	Accepted as Invited Talk	Olga Miroshkina	University of Duisburg-Essen Germany
10:00-10:20	Spin Supersolid and Giant Magnetocaloric Effect for Extreme Refrigeration	Accepted as Contributed Talk	Gang Su	Institute of Theoretical Physics, Chinese Academy of Sciences China
10:20-10:40	Revealing the high energy barrier hydroxyl radical dissociation mechanism of dihydroxylammonium 5,5′-bistetrazole-1,1′-diolate (TKX-50) explosive under shock	Accepted as Contributed Talk	Danyang Liu	State Key Laboratory of Explosion Science and Safety Protection, Beijing Institute of Technology China
10:40-11:00	Correlation between Negative Dielectric Permittivity and Magnetism in spinel ferrite nano-structures	Accepted as Contributed Talk	Sourav Sarkar	S. N. Bose National Centre for Basic Sciences India
11:00-11:15	**Coffee Break**			
Session Moderators: Mehmet Ali Aksan & Olga Miroshkina				
11:15-11:45	Rear-earth-based layered composite magnetic refrigerants for hydrogen liquefaction	Accepted as Invited Talk	Jacek Ćwik	Institute of Low Temperature and Structure Research Poland
11:45-12:05	Planar Magnetic Shields Using Ferromagnetic Washers to Screen In-Plane Fields	Accepted as Contributed Talk	Thomas Pirottin	Depart ment of Electrical Engineering and Computer Science,

Time	Title	Status	Author	Affiliation/Country
				University of Liège Belgium
12:05-12:25	Optical Model for Description of Mg-doped Quaternary Diluted Semiconductors	Accepted as Contributed Talk	Sergii Mamykin	V.E. Lashkaryov Institute of Semiconductor Physics of NASU, Kyiv, Ukraine Ukraine
12:25-12:45	Investigating Cluster Dynamics Near the Ferromagnetic Quantum Critical Point in magnetic Alloys Using μSR	Accepted as Contributed Talk	Hind Adawi	Jazan University Saudi Arabia
12:45-14:00	**Lunch**			
14:00-14:45	**Half-Plenary Talk Hall 1 & Hall 2**			
Session Moderators: Özgür Öztürk & Nurizhat Abdulkadirova				
14:45-15:15	Advanced Magnetic Materials for Energy Storage	Accepted as Invited Talk	Igor Zhitomirsky	Department of Materials Science and Engineering, McMaster University Canada
15:15-15:35	Electric and Magnetic characteristic of ZnO-based nanoparticles (Eddited)	Accepted as Contributed Talk	Zeynab Rahmani	Department of Physics, Faculty of Sciences, Urmia University, Urmia, Iran Iran
15:35-15:55	Structure, microstructure, photoluminescence, ESR, and antibacterial properties of concentration-dependent Fe/Y co-doped ZnO nanoparticles	Accepted as Contributed Talk	Lutfi Arda	Bahcesehir University Türkiye

Magnetism of Nanoparticles, Nano-Wires and Nano-Structures

HALL 9 - Halide Edib Adıvar | **16:30** | **Co-organizers: Mehmet Ali Aksan & Özgür Öztürk**

Time	Title	Status	Author	Affiliation/Country
Özgür Öztürk & Nurizhat Abdulkadirova				
16:30-16:50	Ferromagnetic reversal mechanism and electrical properties of 1-dimensiaonl Co1-xAgx composite nanowires synthesized using time varying electrodeposition technique	Accepted as Contributed Talk	SAIF-Ullah Awan	National University of Sciences and Technology (NUST) Pakistan

Presentations

Thursday, May 1st, 2025

Previous Day Next Day

Presentations

Friday, May 2nd, 2025

Previous Day | Next Day

Sessions by Room

Room Name	Session Name	Start Time
HALL 1 - Mevlana 1	Plenary	08:30:00
	Half-Plenary 1	14:00:00
	Theory of Superconductivity	09:30:00
HALL 2 - Mevlana 2	Half-Plenary 2	14:00:00
	Magnonic structures and devices, including microwave and terahertz devices	09:30:00
	Spintronics Materials-Devices and Applications	11:15:00
HALL 3 - Yunus Emre 1	Quantum spin and magnetism in chiral materials: CISS effect, solitons and skyrmions	09:30:00
HALL 4 - Yunus Emre 2	Multicomponent Superconductivity and Related Phenomena	09:30:00
	Nonuniform Magnetic Textures: Vortices, Skyrmions and Hopfions	11:15:00
HALL 5 - Aristo	Superconductivity in Lower Dimensions	09:30:00
HALL 6 - Eflatun	HTS Cuprates: Advances in Fundamentals and Experimental Studies	09:30:00
HALL 7 - Hipokrat	Ferrites: Electronics and Renewable Energy Applications	09:30:00
HALL 8 - İbn-i Sina	Bulk Superconductors	09:30:00
HALL 9 - Halide Edib Adıvar	Graphene and 2D Materials (2DM) – Fundamentals and Applications	09:30:00

HALL 1 - Mevlana 1

Plenary

HALL 1 - Mevlana 1	08:30	

Time	Title	Status	Author	Affiliation/Country
Roland Wiesendanger & Yılmaz Şimşek				
08:30-09:15	Superconducting Electronics and Spintronics for Energy-Efficient Classical and Quantum Computing	Accepted as Plenary Talk	Oleg Mukhanov	SEEQC USA
09:15-14:45				
Samuele Sanna & Sabri Koraltan				
14:45-15:30	Happy Ending to a 50-year-old Mystery: Scientific Breakthroughs of α″-Fe16N2 Leading to Environmentally-Friendly Permanent Magnet and Discovery of a New Soft Magnetic Material - Minnealloy α″-Fe16(NC)2	Accepted as Plenary Talk	Jian-Ping Wang	University of Minnesota USA
Arkady Zhukov & Jordi Sort				
15:30-16:15	Voltage & Current Controlled Nanomagnetism For Memory and Logic	Accepted as Plenary Talk	Ramamoorthy Ramesh	UC Berkeley, USA USA
16:15-16:30	**Coffee Break**			

Time	Title	Status	Author	Affiliation/Country
Neven Barisic & John Wei				
16:30-17:15	Superconductors with Tc on demand made of artificial heterostructures by quantum design shed light on the high Tc mechanism in cuprates	Accepted as Plenary Talk	Antonio Bianconi	RICMASS, Superstripes, Italy
17:15-18:30	**Closure Session**			
18:30-19:30	**Farewell Reception**			

Half-Plenary 1

HALL 1 - Mevlana 1 | **14:00** | **Victor Laliena & Ana Arauzo**

Time	Title	Status	Author	Affiliation/Country
14:00-14:40	Magneto-ionic Phenomena for Low-power Memory and Prospective Synaptic Applications	Accepted as Half-Plenary Talk	Jordi Sort	Universitat Autonoma de Barcelona Spain

Theory of Superconductivity

HALL 1 - Mevlana 1 | **09:30** | **Co-organizers: Iman Askerzade**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Iman Askerzade & Igor Herbut				

Time	Title	Status	Author	Affiliation/Country
09:30-10:00	SO(8) theory of the superconductor-insulator transition of Dirac fermions in two dimensions	Accepted as Keynote Talk	Igor Herbut	Simon Fraser University Canada
10:00-10:30	Double quantum dot Andreev molecules: Phase diagrams and critical evaluation of effective models	Accepted as Invited Talk	Tomáš Novotný	Department of Condensed Matter Physics, Faculty of Mathematics and Physics, Charles University in Pr Czech Republic
10:30-11:00	Confinement effect on upper critical field Hc2	Accepted as Invited Talk	Iman Askerzade	Ankara University Türkiye
11:00-11:15	**Coffee Break**			
Session Moderators: Tomáš Novotný & Chi Ho WONG				
11:15-11:35	A Unified BCS Theory Analysis of Superconductivity Based on True Electron-Phonon Coupling Constants	Accepted as Contributed Talk	Xiaodong Xiang	Southern University of Science and Technology China
11:35-11:55	High-Tc cuprates: what binds the Cooper pairs?	Accepted as Contributed Talk	Saleh Naqib	Department of Physics, Rajshahi University, Bangladesh Bangladesh
11:55-12:15	FFLO superconducting states in two weakly linked superconducting ultrathin films	Accepted as Contributed Talk	Yi Zhou	Chinese Academy of Sciences, Institute of Physics China

HALL 2 - Mevlana 2

Half-Plenary 2

HALL 2 - Mevlana 2	**14:00**	**Arcady Zhukov & Elena Bartolome**

Time	Title	Status	Author	Affiliation/Country
14:00-14:40	Exploring three dimensional spin systems – and beyond	Accepted as Half-Plenary Talk	Claire Donnelly	Max Planck Institute for Chemical Physics of Solids Germany

Magnonic structures and devices, including microwave and terahertz devices

HALL 2 - Mevlana 2 | **09:30** | **Co-organizers: Sergey Nikitov**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Peng Song & Sebastian Wintz				
09:30-10:00	Nonreciprocity Of Magnetoelastic Waves In Non-Collinear Magnetic Layered Structures	Accepted as Invited Talk	Andrei Slavin	Oakland University USA
10:00-10:30	X-Ray Imaging of Antiferromagnetic Dynamics	Accepted as Invited Talk	Sebastian Wintz	Helmholtz-Zentrum Berlin Germany
10:30-10:50	A Novel Superconducting Magnetic Flux Concentrator for Tunneling Magnetoresistive-Superconducting Composite Sensors	Accepted as Contributed Talk	Jiamin Chen	Aerospace Information Research Institute, Chinese Academy of Science China
10:50-11:10	Influence of the Spin Hall Effect on the Resonance Frequency and Magnetic Susceptibility of a Magnonic Waveguide	Accepted as Contributed Talk	Olga Temnaya	IRE RAS Russia

Spintronics Materials-Devices and Applications

HALL 2 - Mevlana 2 | **11:15** | **Co-organizers: Mürsel Alper**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Andrei Slavin & Sebastian Wintz				
11:15-11:45	Spin-orbit electronics in Van der Waals heterostructures	Accepted as Invited Talk	Peng Song	Nanyang Technological University Singapore
11:45-12:00	Quaternary magnetic semiconductors for photonic and spintronic applications	Accepted as Contributed Talk	Oksana Yastrubchak	V.E. Lashkaryov Institute of Semiconductor Physics National Academy of Sciences of Ukraine Ukraine
12:00-12:15	Electrically tunable sub-terahertz resonance in antiferromagnet-based heterostructures	Accepted as Contributed Talk	Ansar Safin	IRE RAS Russia
12:15-12:30	Spin Hall angle probed by planar Hall effect in NiFe/Ta/IrMn and NiFe/Cu/IrMn structures	Accepted as Contributed Talk	Maxim Bakhmetiev	Federal Research Center of Problems of Chemical Physics and Medicinal Chemistry RAS Russia
12:30-12:45	The Effect of Defects on the Magnetic and Structural Characteristics of Co/Ce Co-doped ZnO Nanoparticles	Accepted as Contributed Talk	Lutfi Arda	Bahcesehir University Türkiye

HALL 3 - Yunus Emre 1

Quantum spin and magnetism in chiral materials: CISS effect, solitons and skyrmions

HALL 3 - Yunus Emre 1	09:30	Co-organizers: Javier Campo

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Victor Laliena & Jun-ichiro Kishine				
09:30-10:00	Continuum of Metastable Conical States of Monoaxial Chiral Magnets	Accepted as Invited Talk	Victor Laliena	ICMA - Universidad de Zaragoza Spain
10:00-10:30	Emergent elasticity and wavelike to particle-like crossover in a magnetic chiral soliton lattice	Accepted as Invited Talk	Alexander Ovchinnikov	Ural Federal University Russia
10:30-11:00	Pressure-Induced Evolution of Chiral Magnetic Order and Crystal Structure in Rare-Earth Metals: Tb, Ho, and Tm	Accepted as Invited Talk	Miguel Pardo-Sainz	Aragón Nanoscience and Materials Institute (CSIC-University of Zaragoza) Spain
11:00-11:15	**Coffee Break**			
Session Moderators: Victor Laliena & Sergey Grigoriev				
11:15-11:45	Electron-Chiral Phonon Interaction: Implications for Quantum Materials	Accepted as Invited Talk	Jun-ichiro Kishine	The Open University of Japan Japan
11:45-12:15	Cubic Insulator Chiral Magnets - Design and Control of Crystal Symmetry	Accepted as Invited Talk	Katsuya INOUE	CResCent and WPI-SKCM2, Hiroshima University Japan

HALL 4 - Yunus Emre 2

Multicomponent Superconductivity and Related Phenomena

HALL 4 - Yunus Emre 2	**09:30**	**Co-organizers: Vadim Grinenko & Egor Babaev & Hans-Henning Klauss**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Vadim Grinenko & Egor Babaev				
09:30-10:00	Josephson Tunneling and Thermoelectric Transport in Exfoliated Cuprate Flakes	Accepted as Invited Talk	Ding Zhang	Tsinghua University China
10:00-10:20	Experimental evidence for multicomponent superconductivity and quartic metal phase with broken time-reversal symmetry in the Ba1-xKxFe2As2 system	Accepted as Contributed Talk	Vadim Grinenko	Tsung-Dao Lee Institute, SJTU China
10:20-10:40	NMR Evidence of Pseudogap and Against Spin Magnetism in the Time-Reversal Symmetry Breaking State of Ba1−	Accepted as Contributed Talk	Florian Bärtl	HZDR-HLD Germany
10:40-11:00	Chiral superconductivity and Chern-number landscape in SnSi(111)	Accepted as Contributed Talk	Stephan Rachel	University of Melbourne Australia

Nonuniform Magnetic Textures: Vortices, Skyrmions and Hopfions

HALL 4 - Yunus Emre 2 | **11:15** | **Co-organizers: Sebastian Wintz & Sabri Koraltan**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Vadim Grinenko & Sabri Koraltan				
11:15-11:45	Unraveling the Magneto-Ionic Vortex: Formation and Control	Accepted as Invited Talk	Irena Spasojević	Autonomous University of Barcelona Spain
11:45-12:15	Multidimensional Control of Chiral Topological Spin Textures: From Current to Light and Chaotic Dynamics	Accepted as Invited Talk	Kai Litzius	Helmholtz Zentrum Berlin Germany

Time	Title	Status	Author	Affiliation/Country
12:15-12:45	Nanoscale Control of Chiral Domain Walls for Spintronic Memory and Logic Devices	Accepted as Invited Talk	Andrea Migliorini	Max Planck Institute of Microstructure Physics Germany

HALL 5 - Aristo

Superconductivity in Lower Dimensions

HALL 5 - Aristo | **09:30** | **Co-organizers: Andrei Zaikin**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Andrei Zaikin & Aleksandr Latyshev				
09:30-10:00	Absence of “fractional ac Josephson effect” in superconducting junctions	Accepted as Invited Talk	Andrei Zaikin	National Research University Higher School of Economics Russia
10:00-10:30	Interplay between the nonlocal superconducting pairing and ferroelectric ordering in low dimensional heterostructures	Accepted as Invited Talk	Alexander Mel'nikov	Moscow Institute of Physics and Technology Russia
10:30-11:00	Current quantization in small Josephson junctions due to synchronization of Bloch oscillations with microwave. Bloch Transistor.	Accepted as Invited Talk	Rais Shaikhaidarov	Royal Holloway University United Kingdom
11:00-11:15	**Coffee Break**			
Session Moderators: Andrei Zaikin & Alexander Mel'nikov				

Time	Title	Status	Author	Affiliation/Country
11:15-11:45	Revisiting the Dissipative Quantum Phase Transition in Josephson Junctions: Theory and Recent Debates	Accepted as Invited Talk	Aleksandr Latyshev	Departement de Physique Theorique, Universite de Geneve Switzerland
11:45-12:15	Quantum Coulomb drag mediated by cotunneling of fluxons and Cooper pairs	Accepted as Invited Talk	Andrew Semenov	Skolkovo Institute of Science and Technology & P.N.Lebedev Physical Institute RAS Russia
12:15-12:45	Coherent Current of Non-Equilibrium Quasiparticles Injected into a Superconductor	Accepted as Invited Talk	Anatoliy Gurskiy	HSE University Russia

HALL 6 - Eflatun

HTS Cuprates: Advances in Fundamentals and Experimental Studies

HALL 6 - Eflatun | **09:30** | **Co-organizers: Davor Pavuna & Neven Barisic**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Davor Pavuna & Neven Barisic				
09:30-10:00	Unusual Low-Energy Collective Charge Excitations in High-Tc Cuprate Superconductors	Accepted as Invited Talk	Dmitri Efremov	IFW Dresden Germany
10:00-10:20	FL* approach to Cuprates with an experimental prediction	Accepted as Contributed Talk	Pieralberto Marchetti	Dipartimento di Fisica e Astronomia, Università di Padova Italy

Time	Title	Status	Author	Affiliation/Country
10:20-10:40	Electromigration-Driven Weak Resistance Switching in High-Temperature Superconducting Devices	Accepted as Contributed Talk	Daniel Stoffels	University of Liège Belgium

HALL 7 - Hipokrat

Ferrites: Electronics and Renewable Energy Applications

HALL 7 - Hipokrat | **09:30** | **Co-organizers: Muhammad Anis-ur-Rehman**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Muhammad Anis-ur-Rehman & Shahid Husain				
09:30-10:00	Crystal growth and spin reorientation transition inSm1−xRxFeO3 orthoferrite	Accepted as Invited Talk	Anhua Wu	Shanghai Institute of Ceramics, Chinese Academy of Sciences China
10:00-10:20	Spinel Ferrites: Analysis of Structural and Electrical Properties as Active ReRAM Materials.	Accepted as Invited Talk	Muhammad Anis-ur-Rehman	COMSATS University Islamabad, Islamabad, Pakistan Pakistan
10:20-10:40	Structural and Conduction Properties of the Rare Earth Doped (Ba0.5Sr0.5)1-xCex Co0.8Fe0.2O3-δ Cobalt Oxide Nanoparticles	Accepted as Contributed Talk	Tanveer Akhtar	COMSATS University Islamabad, Islamabad, Pakistan Pakistan
10:40-11:00	Tailoring the Properties of Mo-Substituted Ni-Zn Ferrites for Spintronic and Magnetic Sensor Applications	Accepted as Contributed Talk	Jamal Uddin Ahamed Jamal	Dept. of EEE, University of Chittagong, Chittagong Bangladesh
11:00-11:15	**Coffee Break**			

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Muhammad Anis-ur-Rehman & Anhua Wu				
11:15-11:45	Structural, Magnetic and Electrochemical Investigations of co-doped Co2Fe2O4	Accepted as Invited Talk	Shahid Husain	Aligarh Muslim University India
11:45-12:05	Exploring room-temperature anti-ferromagnetism in newly predicted 2D Mbene M4B6 (M: Cr, Mn, Fe) monolayer using first-principles calculations	Accepted as Contributed Talk	Altaf Rahman	Riphah International University, Lahore, Pakistan Pakistan
12:05-12:25	Structural, optical, magnetic and electrical properties of aluminum doped manganese zinc ferrite	Accepted as Contributed Talk	Ghulam Asghar	University of Poonch Rawalakot AJK Pakistan Pakistan
12:25-12:45	Ceramic mixed (ionic-electronic) conductors for solid-state energy devices	Accepted as Contributed Talk	Rizwan Raza	COMSATS University Lahore Pakistan
12:45-13:05	Electromagnetic, Magnetic, and Structural Parameters Calculations of LiZnCu Ferrite Nanostructures	Accepted as Contributed Talk	Emad Al-Shakarchi	Dijlah University College Iraq

HALL 8 - İbn-i Sina

Bulk Superconductors

HALL 8 - İbn-i Sina | **09:30** | **Co-organizers: S. Barış Güner & Kévin Berger**

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Kévin Berger & Tetiana Prikhna				
09:30-10:00	Microstructure and properties of bulk GdBCO	Accepted as Invited Talk	Pavel Diko	Institute of Experimental Physics, Slovak Academy of

Time	Title	Status	Author	Affiliation/Country
	superconductors prepared by SDMG			Sciences Slovakia
10:00-10:20	AC loss analysis of magnetic gear system with superconducting component	Accepted as Contributed Talk	Emre Akyerden	Research assistant Türkiye
10:20-10:40	Optimization of ball-milling and sintering process to fabricate high-performance superconducting MgB2 bulks	Accepted as Contributed Talk	Tayebeh Mousavi	King's College London United Kingdom
10:40-11:00	Magnetic levitation forces in MgB2 bulks produced by conventional sintering, in-situ and ex-situ	Accepted as Contributed Talk	Burcu Savaşkan	Karadeniz Technical University Türkiye
11:00-11:15	**Coffee Break**			
Session Moderators: Kévin Berger & Pavel Diko				
11:15-11:35	The Influence of Impurity Oxygen on the Structure and Characteristics of MgB2	Accepted as Invited Talk	Tetiana Prikhna	V. Bakul Institute for Superhard Materials of the National Academy of Sciences of Ukraine Ukraine
11:35-11:55	Study of mechanical stresses in HTS bulks with pores during PFM	Accepted as Contributed Talk	Kévin Berger	Université de Lorraine - GREEN France
11:55-12:15	Determination of Levitation Force Parameters Between PMG, HTS and Aluminium Rail of the High-Velocity EDL Maglev System	Accepted as Invited Talk	Ufuk Kemal ÖZTÜRK	Karadeniz Technical University Türkiye
12:15-12:35	Ultra-short pulsed laser machining of YBCO bulk superconductors	Accepted as Contributed Talk	Fatima Al-Mokdad	Ankara University Türkiye
12:35-13:05	Review of Existing Problems on Superconducting Materials with Proposed Solutions	Accepted as Invited Talk	Ekrem Yanmaz	Karadeniz Technical University Türkiye

HALL 9 - Halide Edib Adıvar

Graphene and 2D Materials (2DM) – Fundamentals and Applications

HALL 9 - Halide Edib Adıvar	09:30	Co-organizers: Ahmet Avşar

Time	Title	Status	Author	Affiliation/Country
Session Moderators: Ahmet Avşar & Berna Akgenc Hanedar				
09:30-10:00	Nonlinear optical properties in symmetry-controlled two-dimensional magnets	Accepted as Invited Talk	Toshiya Ideue	The University of Tokyo Japan
10:00-10:20	Tailoring Electronic States: from High-Order to Mixed-Dimensional Moiré Effect	Accepted as Invited Talk	Nan Xu	Wuhan University China
10:20-10:40	Electron-plasmon Scattering in Doped Graphene	Accepted as Contributed Talk	Josip Jakovac	Institute of physics Croatia
10:40-11:00	Ultrafast electronic transitions in afrtificial relativistic atoms formed by Coulomb impurities in graphene driven by fast ions	Accepted as Contributed Talk	Saparboy Rakhmanov	Chirchik State Pedagogical University Uzbekistan
11:00-11:15	**Coffee Break**			
Session Moderators: Ahmet Avşar & Toshiya Ideue				
11:15-11:45	Tuning electronic and magnetic properties of SnTe monolayer	Accepted as Invited Talk	Berna Akgenc Hanedar	Koç University Türkiye
11:45-12:05	Dielectric and Electrical properties of cobalt ferrite and graphene oxide composites	Accepted as Contributed Talk	Samia Sadaqat Hussain	Rawalpindi Women University, Pakistan Pakistan

Time	Title	Status	Author	Affiliation/Country
12:05-12:25	Strain-Engineered TMDC Nanotubes for Tunable Gradient-Index (GRIN) Lenses in Advanced Photonic Applications	Accepted as Contributed Talk	Çağatay İleten	TÜBİTAK National Metrology Institute, UME Türkiye

Presentations

Friday, May 2nd, 2025

Previous Day Next Day

Presentations

Saturday, May 3rd, 2025

Previous Day

Sessions by Room

Room Name	Session Name	Start Time
TECHNICAL TOUR	Poster Session	10:00:00

TECHNICAL TOUR

Poster Session

TECHNICAL TOUR	10:00	Not chosen

Time	Title	Status	Author	Affiliation/Country
10:00-10:20	TECHNICAL TOUR (Visit to Power-Plants-Measures taken for Climate Change Chalanges) Itenary will be provided soon on this page!	Accepted as Contributed Talk	Ali Gencer	Ankara University Türkiye

Presentations

Saturday, May 3rd, 2025

Previous Day