

# AtC-AtG CONFERENCE PROGRAM

## 2 OCTOBER 2024

### Opening session

UTC	CEST	JST	PDT	EDT
-00:15	01:45	08:45	16:45	19:45

### Session 1

UTC	CEST	JST	PDT	EDT
00:00	02:00	09:00	17:00	20:00

00:00	Plenary speaker: Chi-Feng PAI	Long-Range Interlayer Chiral Exchange – Known and Unknown	Taiwan
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00:45	Harini HAPUARACHCHI	Plasmonically Enhanced Quantum Diamond Magnetometry	Australia
01:00	Fernando MENESES	Real-time Monitoring Application Using Quantum Diamond Magnetometry and Machine Learning	Australia
01:15	Haruka KOMIYAMA	Quantitative Evaluation Method for Magnetoelastic Coupling between Surface Acoustic Waves and Spin Waves	Japan
01:30	Kodchakorn SIMALAOTAO	First-Principles Prediction of High Magnetoresistance in CPP-GMR Devices Using Cu-X Spacers with a Half-Metallic $\text{Co}_2\text{FeGa}_{0.5}\text{Ge}_{0.5}$ Electrode	Japan
01:45	Yu-Sheng TSENG	Probing Magnetic Anisotropy in Cr-Intercalated CrTez Layered Transition Metal Halides: Spin-Orbit Torque Method	Taiwan

### Session 2

UTC	CEST	JST	PDT	EDT
02:00	04:00	11:00	19:00	22:00

02:00	Yuxin SI	Probing Magnetization Switching Using Nonlinear Magnetoresistance and Anomalous Nernst Effect	Singapore
02:15	Prashant KUMAR	Sputter-Deposited Magnetic and Dynamic Studies on FeAl Alloy Thin Film on Conducting Flexible Copper Tape Substrate	India
02:30	Mohd Shaikh SABIR	Spin Wave Interference Device for Low-Power Physical Neuromorphic Hardware	India

02:45	Semi-plenary speaker: Kyoung-Whan KIM	Dynamics of Orbital Angular Momentum in Nonequilibrium Solids	Korea
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03:15	$\alpha$ -Poster session / Social activity (Gather.Town)		
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## Session 3

UTC	CEST	JST	PDT	EDT
04:00	06:00	13:00	21:00	00:00

**04:00** *Semi-plenary speaker:* **Yukako FUJISHIRO** *Electromagnetic Responses upon Topological Phase Transitions in Cubic Chiral Magnets* Japan

04:30	Kirill ROGACHEV	<i>Magnetic Thin Films on Nano Curved Surfaces</i>	Russia
04:45	Manu MOHAN	<i>Magnetic Switching and Exchange Bias Investigations in Modified SmCrO<sub>3</sub></i>	India
05:00	Chinmayee CHOWDE GOWDA	<i>Magnetic Two-Dimensional Chromium Telluride (CrTe<sub>3</sub>) Metamaterial for Harvesting Acoustic Waves</i>	India
05:15	Saswata HALDER	<i>Magnetic Ground State in Ce<sub>3</sub>ZrBi<sub>5</sub> Single Crystals</i>	India
05:30	Kshitij Singh RATHORE	<i>Magnon Mediated Spin Pumping by Coupled Ferrimagnetic Garnets Heterostructure</i>	India
05:45	Esita PANDEY	<i>Strain-Tuned Magnetism in Flexible Pd/Co/C<sub>60</sub> Thin Film</i>	India

## Session 4

UTC	CEST	JST	PDT	EDT
06:00	08:00	15:00	23:00	02:00

06:00	Hardepinder SINGH	<i>Influence of Interfacial Spin-Glass-Like Disorder and Frustration on Exchange Bias Characteristics in Interdiffused MnN/Fe Bilayers</i>	India
06:15	Shivangi SHRINGI	<i>Multiplexer Based on Skyrmions Confined by Energy Barriers in Magnetic Nanotrack</i>	India
06:30	ANUSREE V.K.	<i>Magnetic Glassy State in the Single Layered Ruddlesden-Popper Phase PrCaFe<sub>0.5</sub>Co<sub>0.5</sub>O<sub>4</sub></i>	India

**06:45** *Semi-plenary speaker:* **Binoy Krishna HAZRA** *Seeded Spin-Orbit Torque in Non-Collinear Antiferromagnet* India

**07:15**  **$\beta$ -Poster session / Social activity**  
(Gather.Town)

## Session 5

UTC	CEST	JST	PDT	EDT
08:00	10:00	17:00	01:00	04:00

08:00	Plenary speaker: Mohamed BELMOUBARIK	Non-MgO Materials as Alternative Barriers in Magnetic Tunnel Junctions for Spintronics Applications	Morocco
08:45	Zhewen XU	Observation of Chiral Domain Wall in Octupole-Ordered Antiferromagnet	Switzerland
09:00	Theo BALLAND	Tuning of The Skyrmion Diffusion by Interactions with Chiral Polypeptides	Germany
09:15	Kilian LEUTNER	Multiturn Counter-Sensor Device Based on Skyrmions	Germany
09:30	Mafalda MOREIRA	Advancing Flexible Spintronics through Scalable Tuning of Topological Insulator Thin Films	Portugal
09:45	Vanessa PILATI	Superparamagnetic Mn-Ferrite Nanolabels for Radiofrequency Inductive Detection in Magnetic Lateral Flow Immunoassays	Spain

## Session 6

UTC	CEST	JST	PDT	EDT
10:00	12:00	19:00	03:00	06:00

10:00	Frederik DURHUUS	On the Attraction of Superparamagnetic Nanoparticles	Denmark
10:15	Michele MODESTINO	Magneto-Optical Study of Magnetic Nanomaterials Embedded in a Keratin Film	Italy
10:30	Aditya KUMAR	Identifying the Origin of Thermal Modulation of Exchange Bias in MnPS <sub>3</sub> /Fe <sub>3</sub> GeTe <sub>2</sub> van der Waals Heterostructures	Germany
10:45	Semi-plenary speaker: Pelin TOZMAN	Development of Magnetic Recording Strategies: A Journey from Magnetic Tape to Multi-Level Heat-Assisted Magnetic Recording	Germany
11:15	γ-Poster session / Social activity (Gather.Town)		

## Session 7

UTC	CEST	JST	PDT	EDT
12:00	14:00	21:00	05:00	08:00

**12:00** *Semi-plenary speaker:* **Sabri KORALTAN** *Dipolar Stabilized Skyrmions and Antiskyrmions in Ferro- and Ferrimagnetic Multilayers* Austria

12:30	Lars SJÖSTRÖM	<i>Nonlinear Hall Effect in Multilayer Magnetic Topological Insulator MnBi<sub>2</sub>Te<sub>4</sub></i>	Sweden
12:45	Harikrishnan VIJAYAN	<i>High Performance Hexaferrite Ceramic Magnets Made from Nanoplatelets of Ferrihydrite by High-Temperature Calcination for Permanent Magnet Application</i>	Spain
13:00	Mona FADEL	<i>Carbon-supported Ni Nanoparticles: Synergizing of Magnetism and Adsorption for Advanced Water Decontamination</i>	Spain
13:15	Rana SAYED	<i>BiFeO<sub>3</sub> Temperature-Dependent Electron Density Map study</i>	Egypt
13:30	Leyre FRAILE	<i>Radio Frequency Analysis of Magnetic Nanoparticle Distributions on Rigid Substrates for Biosensing Applications</i>	Spain
13:45	Carlos ROQUE	<i>Does Plasmonics Influence Topological Surface States? A Case Study of Bi<sub>2</sub>Te<sub>3</sub></i>	Portugal

## Session 8

UTC	CEST	JST	PDT	EDT
14:00	16:00	23:00	07:00	10:00

14:00	Leonor ANDRADE	<i>Role of the Synthesis Procedure on Structural, Morphological and Magnetocaloric Properties of RE<sub>2</sub>NiMnO<sub>6</sub> (RE = Er, Nd) Double Perovskites</i>	Portugal
14:15	Mahmoud SALIM	<i>High Quality Phase Formation of Perovskite La<sub>0.67</sub>Sr<sub>0.33</sub>MnO<sub>3</sub> Colossal-Magneto-Resistance (CMR) Controlled by Mechanical Grinding Time</i>	Egypt
14:30	Francisco ALONSO	<i>Synthesis of Magnetic Nanoparticles Using Rapid Microwave Plasma Hydrogenation for Biomedical Applications</i>	Spain

**14:45** *Semi-plenary speaker:* **Sofia FERREIRA-TEIXEIRA** *Two Sides of Spin to Charge Interconversion: From Topological Insulators to Layered Magnetic Materials* Spain

**15:15** **δ-Poster session / Social activity**  
(Gather.Town)

## Session 9

UTC	CEST	JST	PDT	EDT
16:00	18:00	01:00	09:00	12:00

**16:00** Plenary speaker:  
Tiffany SANTOS *Spins and Flips: Advanced Studies with Tiny MRAM Bits* USA

16:45	Soudabeh ARSALANI	<i>Imaging a Bolus of Magnetic Nanoparticles by Magnetorelaxometry Technique</i>	Germany
17:00	Charlie SAMIENTO	<i>Barkhausen Noise and Skyrmionium-to-Skyrmion Transition</i>	Brazil
17:15	Pasquini GABRIELA	<i>Magnetic-Domain-Wall AC Dynamics and Roughness in Ultrathin Ferromagnetic Films</i>	Argentina
17:30	Teresa JEFFREY	<i>Magnetometry-Based Technique for Measuring Milling Rates of Magnetic Thin Films</i>	USA
17:45	Giuliano BASSO	<i>Experimental Determination of Magnetic Relaxation Time for Nanoparticles in Aqueous-Based Colloid during Solid-Liquid Phase Transition</i>	Argentina

## Session 10

UTC	CEST	JST	PDT	EDT
18:00	20:00	03:00	11:00	14:00

18:00	Noelia BAJALES	<i>Co<sub>x</sub>Ni<sub>100-x</sub> Nanodots: A Micromagnetic Approach towards Enhanced Electrochemical Performance for Supercapacitors</i>	Argentina
18:15	Yeni SANCHEZ-LEON	<i>Study of the Magnetic Properties of System Spin-Glass/ Ferrimagnetic FeN<sub>0.8</sub>Cr<sub>1.8</sub>S<sub>4</sub>/CoFe<sub>2</sub>O<sub>4</sub></i>	Venezuela
18:30	Jinho LIM	<i>Very Narrow Linewidth of Resonantly Driven Propagating Magnons with Submicron-Scale Wavelengths and Associated Damping</i>	USA

**18:45** Semi-plenary speaker:  
Sajid HUSSAIN *Magnetoelectric Spin-Orbit Memory Concept and Future Challenges* USA

**19:15**  $\epsilon$ -Poster session / Social activity  
(Gather.Town)

## Session 11

UTC	CEST	JST	PDT	EDT
20:00	22:00	05:00	13:00	16:00

**20:00** *Semi-plenary speaker:*  
**Michelle JAMER** *Decoding the Magnetic Properties of Helical Spin Spirals* USA

20:30	Thiago MELLO	<i>Au and Ag Bowtie Nanoantennas for Solar Energy Harvesting</i>	Brazil
20:45	Hannah BRADLEY	<i>Directed Graph Neural Networks with Antiferromagnetic Artificial Neurons</i>	USA
21:00	Liam SCHMIDT	<i>Probing Magnetic Anisotropy in 2D Magnets with X-ray Spectroscopy</i>	USA
21:15	Farzad MAHFOUZI	<i>Current-Induced Circular Dichroism on Metallic Surfaces: A First-Principles Study</i>	USA
21:30	Yibo ZHANG	<i>Comprehensive Database of Magnetic Materials Using AI-Driven Methodologies</i>	USA
21:45	Myoung-Woo YOO	<i>Numerical Calculations of Domain-Wall Dynamics in Noncollinear Antiferromagnets</i>	USA

## Session 12

UTC	CEST	JST	PDT	EDT
22:00	00:00	07:00	15:00	18:00

22:00	Robin KLAUSE	<i>Unconventional Field-Like Spin Torques in CrPt<sub>3</sub></i>	USA
22:15	Juan M OROZCO-HENAO	<i>Magnetic Nanoparticles: Effect of Magnetite/Maghemite Content on the Heating Efficiency</i>	USA

**22:30** *Semi-plenary speaker:*  
**John FULLERTON** *Complex Spin Textures in Three-Dimensional Nanohelices* USA

23:00	<b>ζ-Poster session / Social activity</b> (Gather.Town)		
24:00	<b>Parting words &amp; Aftershow party</b> (Gather.Town)		