

AtC-AtG CONFERENCE PROGRAM

31 August 2022

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 *Invited speaker:* **Fanny BÉRON** *Tuning isolated zero-field skyrmions and spin spirals at room-temperature in synthetic ferrimagnetic multilayers* **Brasil**

00:45	Ekaterina DENGINA	<i>Neural network prediction of nanodefects and magnetic anisotropy in FePt-X HAMR Media</i>	Japan
01:00	María Soledad APREA	<i>Magnetic properties of polycrystalline cylindrical Fe₆₅Pd₃₅ nanowires</i>	Argentina
01:15	Susant Kumar ACHARYA	<i>Ionic liquid gating control of magnetic anisotropy in magnetic tunneling junction stacks</i>	New Zealand
01:30	Adam G WHITNEY	<i>Damping in STT-MRAM free layers at elevated temperatures</i>	USA
01:45	McCoy Wei LIM	<i>Current-induced nucleation of magnetic skyrmions in multilayered devices</i>	Singapore

Session 2

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

02:00	Sen YAN	<i>Extracellular magnetic labeling of mesenchymal stem cell spheroids with ferumoxytol for MRI tracking</i>	China
02:15	Yuhua REN	<i>Estimation of magnetic parameters from domain images with convolutional neural networks</i>	Singapore
02:30	Esita PANDEY	<i>Emergence of sizeable interfacial Dzyaloshinskii-Moriya interaction at Cobalt/Fullerene spinterface</i>	India

02:45 *Invited speaker:* **Max HIRSCHBERGER** *Spin Dynamics and electronic transport: emergent inductance and chiral fluctuations* **Japan**

03:15 **Poster session / Social activity**
(Gather.Town)

Session 3

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

04:00 *Invited speaker:*
Se Kwon KIM *Topological spin transport in two-dimensional magnets* South Korea

04:30	Ming Sheng Nicholas TEY	Hardware accelerated spiking neural networks based on zero-field skyrmions	Singapore
04:45	Koustuv ROY	Spin Pumping and Inverse spin Hall effect in Co_3O_4	India
05:00	Shaktiranjana MOHANTY	Magnetization reversal and domain structures in perpendicular synthetic antiferromagnets prepared on rigid and flexible substrates	India
05:15	Soumyaranjan RATHA	Enhancement of magnetic properties by Lanthanides substitution in $(\text{Bi,L})(\text{Fe,Co})\text{O}_3$ ($L = \text{La, Nd, Sm, Gd, Dy, Er}$) multiferroic thin films	Japan
05:30	Brindaban OJHA	Excess velocity of domain walls in Pt/CoFeB thin films	India
05:45	Michael DEREVYANKO	Temperature dependence of electric impedance of the Cobalt-based soft magnetic wires near the ferromagnetic phase transition	Russia

Session 4

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

06:00	Rajeswari ROY CHOWDHURY	An alternative route for tuning unconventional Hall effect in layered ferromagnet $\text{Fe}_3(\text{Ge,As})\text{Te}_2$	India
06:15	Ravindra MEENA	Europium coated Mn doped Fe_2O_4 nanoparticle for Magnetic hyperthermia: Synergistic strategy for cancer treatment and imaging	India
06:30	Jintao SHUAI	Enhanced domain wall motion by surface acoustic waves	UK

06:45 *Invited speaker:*
Peng SONG *Detection of 2D magnetic states with spin Hall effects* Singapore

07:15 **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 *Invited speaker:*
Xichao ZHANG *Frustrated skyrmions and bimerons* Japan

08:45	Mona BHUKTA	<i>Room-temperature stabilization of skyrmionic surface-magnetic textures in synthetic antiferromagnets</i>	Germany
09:00	Anastasiia Evgenievna DRIAGINA	<i>Synthesis and magnetic properties of nanowires in thin-film anodic alumina</i>	Russia
09:15	Aijaz Hamid LONE	<i>Skyrmion based neuromorphic device with short- and long-term synaptic plasticity</i>	Saudi Arabia
09:30	Zilu WANG	<i>Field-free spin orbit torque switching of synthetic antiferromagnet through interlayer Dzyaloshinskii-Moriya interaction</i>	China
09:45	Sumit GHOSH	<i>Ultrafast optical generation of magnetic texture pairs</i>	Germany

Session 6

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

10:00	Luciano MAZZA	<i>Unconventional computing using spintronic oscillators</i>	Italy
10:15	Maarten Alexander BREMS	<i>Brownian reservoir computing realized using geometrically confined skyrmions</i>	Germany
10:30	Marta BRIOSCHI	<i>All-optical generation and time-resolved polarimetry of magneto-acoustic resonances via Transient Grating spectroscopy</i>	Italy

10:45 *Invited speaker:*
Claire DONNELLY *Visualising three-dimensional spin textures* Germany

11:15 *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 *Invited speaker:*
Mariia EFREMOVA *Genetically controlled magnetic nanocompartments for cell manipulation - better than ferritin?* Netherlands

12:30	Lin LUO	<i>Microstructure and magnetocaloric effect of $Mn_{1.3}Fe_{0.6}P_{0.5}Si_{0.5}$ microwires</i>	Spain
12:45	Gunasheel Kawtilyaa KRISHNASWAMY	<i>Time-dependent multistate switching of topological antiferromagnetic order in Mn_3Sn</i>	Switzerland
13:00	Lionel PETIT	<i>Graphene Hall sensors for high performance magnetometry</i>	France
13:15	Javier HERMOSA	<i>3D magnetic structure of Py microstructures studied by vector tomography and micromagnetism</i>	Spain
13:30	Martín TESTA-ANTA	<i>Leveraging symmetry for an accurate spin-orbit torque quantification in ferrimagnetic insulators</i>	Spain
13:45	Sebastián Alejandro DÍAZ	<i>Steering Majorana braiding via skyrmion-vortex pairs: A scalable platform</i>	Germany

Session 8

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

14:00	Juan Diego AGUILERA	<i>Gas sensors using magnetic nanoparticles and spin waves</i>	Spain
14:15	Oliver James AMIN	<i>Antiferromagnetic half-skyrmions electrically generated and controlled at room temperature</i>	UK
14:30	Joanna WOLFF	<i>Optomechanics of magnetic van der Waals heterostructures</i>	France

14:45 *Invited speaker:*
Alexander MOOK *Interacting Topological Magnons* Germany

15:15 **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 *Invited speaker:*
Miriam JAAFAR *Advances in magnetic force microscopy* Spain

16:45	Marco Antonio MORALES	$Mn_xFe_{3-x}O_4$ Nanoparticles for Magnetic Hyperthermia	Argentina
17:00	Alberto ANADÓN	Spin conversion in epitaxial monolayer graphene structures	France
17:15	César Leandro LONDOÑO CALDERÓN	Magnetic vortex domain wall observation on iron-cobalt alloy nanowires growing on commercial aluminium	Colombia
17:30	Meg SMITH	Optimisation of perpendicular magnetic tunnel junction structures using scanning transmission electron microscopy	UK
17:45	Cody Alexander TREVILLIAN	Interferometry of Single Magnon Decoherence Mechanisms	USA

Session 10

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

18:00	Estela HERGUEDAS-ALONSO	Recovering 3D magnetization of 2D structures and multilayers	Spain
18:15	TBA	TBA	TBA
18:30	Matthew Ronald MCMASTER	Tuneable low magnetostrictive NiFe multilayers for high-frequency application	UK

18:45 *Invited speaker:*
Xiang CHEN *Magnetism of the van der Waals magnet $(Fe,Co,Ni)_5GeTe_2$* USA

19:15 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 *Invited speaker:*
Gabriel LAVORATO *Hybrid magnetic nanoparticles: from synthesis to applications* Argentina

20:30	Sebastian Eduardo PASSANANTE	<i>Magnetocaloric effect in nanocrystalline manganite bilayer thin films</i>	Argentina
20:45	Robin KLAUSE	<i>Magnetic droplet solutions from exotic spin-orbit torques</i>	USA
21:00	Petro ARTEMCHUK	<i>Stabilization of a nonlinear spin wave bullet mode in the presence of a hot magnon gas</i>	USA
21:15	Fabiana Nakary MORALES	<i>Magnetocaloric effect of $\text{La}_{0.6}\text{Sr}_{0.4}\text{CoO}_3$ nanoparticles</i>	Argentina
21:30	Hannah BRADLEY	<i>Neuromorphic pattern recognition using antiferromagnetic artificial neurons</i>	USA
21:45	Cristóbal Ríos VENEGAS	<i>Dynamic origin of conical helix magnetization textures stabilized by Dzyaloshinskii-Moriya interaction</i>	Chile

Session 12

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

22:00	Josefina M SILVEYRA	<i>A new set of curves simplifies anhysteretic magnetization analysis</i>	Argentina
22:15	Santiago Antonio OSORIO	<i>Response of the chiral soliton lattice to spin polarized currents</i>	Argentina
22:30	Yeni Josefina SANCHEZ	<i>Magnetic and structural characterization of the $\text{FeIn}_{2y}\text{Cr}_{2-2y}\text{S}_4$ ($0.6 \leq y \leq 1$) system</i>	Venezuela
22:45	Gilvania Lucia da Silva VILELA	<i>Magnon valves with perpendicular magnetic anisotropy</i>	Brazil
23:00	Poster session / Social activity (Gather.Town)		

23:30 *Invited speaker:*
Jean Anne INCORVIA *Using Magnetic Spin Textures for Cognitive Computing* USA

24:00 **Parting words & Aftershow party**
(Gather.Town)