



# MAGNETISMMMEET2022

APRIL 18-20, 2022

Final Program



## ALBEDO MEETINGS

Floor# 3, Advant Building, 99B, Kakatiya  
Hills, Kavuri Hills, Madhapur Hyderabad,  
TS 500033

Email: [contact@albedomeetings.com](mailto:contact@albedomeetings.com)

**Day 01, April 18, 2022**

**Virtual Presentations**

**Starts @ Beijing Time Zone (GMT + 8)**

09:00-09:10		<b>Introduction</b>
09:10-09:50	<b>P</b>	<b>Title:</b> Magnon-Magnon Interaction and Magnon-Phonon Interaction in 2D Ferromagnetic Materials.
		<b>Zhang Gang</b> , <i>Institute of High Performance Computing, Singapore</i>
09:50-10:15	<b>I</b>	<b>Title:</b> Magnetic Skyrmions for Unconventional Computing.
		<b>Sai Li</b> , <i>Beihang University, China</i>
10:15-10:40	<b>I</b>	<b>Title:</b> Quantum Criticality in Quasi-1D Kondo Lattice.
		<b>Yongkang Luo</b> , <i>Huazhong University of Science and Technology, China</i>
10:40-11:05	<b>I</b>	<b>Title:</b> Recent Progresses in STT-MRAMs and Low power AI Processors with CMOS/MTJ Hybrid Technology.
		<b>Tetsuo Endoh</b> , <i>Tohoku University, Japan</i>
11:05-11:30	<b>I</b>	<b>Title:</b> Spontaneous Brain Activity and Auditory Evoked Fields Measurements via sub - Pico -Tesla Resolution Magneto-Impedance Sensor
		<b>Tsuyoshi Uchiyama</b> , <i>Nagoya University, Japan</i>
11:30-11:55	<b>I</b>	<b>Title:</b> Correlated Anisotropic Properties in Manganite-based Heterostructures.
		<b>Zhen Huang</b> , <i>Anhui University, China</i>
11:55-12:20	<b>I</b>	<b>Title:</b> High-Sensitivity Magnetic Sensor with Co-Riched Amorphous Wire and its Applications.
		<b>Dongfeng He</b> , <i>National Institute for Materials Science, Japan</i>
12:20-12:45	<b>I</b>	<b>Title:</b> Four-Dimensional Geometry-Based Stochastic Channel Modeling for Polarized MIMO Systems with Moving Scatterers
		<b>Hamed Radpour</b> , <i>Korean Advanced Institute of Science and Technology, Korea</i>
12:45-13:10	<b>I</b>	<b>Title:</b> Magnetic Polymers Based on Imidazolium FeCl <sub>4</sub> : From Paramagnetism to Ferromagnetism
		<b>Ren Lixia</b> , <i>Tianjin University, China</i>
13:10-13:35	<b>I</b>	<b>Title:</b> Spin-Orbit-Torque Induced Magnetization Dynamics in Perpendicular Synthetic Antiferromagnets.
		<b>BingJin Chen</b> , <i>Institute of High Performance Computing, Singapore.</i>
13:35-14:00	<b>I</b>	<b>Title:</b> Extraordinary Surface Phase Transitions in Spin Models.
		<b>Jian-Ping Lv</b> , <i>Anhui Normal University, China</i>
14:00-14:25	<b>I</b>	<b>Title:</b> Development of Temperature and Position Detection Techniques for Magnetic Particles for Magnetic Hyperthermia.
		<b>Loi Tonthat</b> , <i>Tohoku University, Japan</i>

14:25-14:50		<b>Title:</b> Atomic-Orbital-Free Ferromagnetism in 2D Electrides.
		<b>Shen Lei</b> , <i>National University of Singapore, Singapore</i>
14:50-15:15		<b>Title:</b> The Retarded Relativistic Potentials of an Arbitrarily Moving Point Particle Possessing the Dipole Moments.
		<b>Seil Sautbekov</b> , <i>Al-Farabi Kazakh State University, Kazakhstan</i>
15:15-15:40		<b>Title:</b> Unravelling Magnetic Proximity Effect at the Surface of a Topological Insulator
		<b>Karthik V Raman</b> , <i>Tata Institute of Fundamental Research, India</i>
15:40-16:05		<b>Title:</b> Spintronics with Heavy Metals, Topological Insulators and Antiferromagnets.
		<b>Subhankar Bedanta</b> , <i>National Institute of Science Education and Research, India</i>
16:05-16:30		<b>Title:</b> Emergent Quantum Transport due to Quenched Magnetic Impurity Scattering by Antiferromagnetic Proximity in SrCuO <sub>2</sub> /SrIrO <sub>3</sub> Bilayer
		<b>Debakanta Samal</b> , <i>Institute of Physics, India</i>
16:30-16:55		<b>Title:</b> Energy-Efficient Spin-Devices and Spin-Circuits
		<b>Kuntal Roy</b> , <i>Indian Institute of Science Education and Research, India</i>
16:55-17:20		<b>Title:</b> Spintronic Devices Based on Bulk Perpendicular Magnetic Anisotropy Materials and Topological Materials.
		<b>Delin Zhang</b> , <i>Tiangong University, China</i>
17:20-17:45		<b>Title:</b> Charge and Magnetic Correlations in the Highly Oxidized Nickelate.
		<b>Hanjie Guo</b> , <i>Songshan Lake Materials Laboratory, China</i>
17:45-18:10		<b>Title:</b> All-Electron Mixed Basis Calculations of 2D Ilmenite
		<b>Khian-Hooi Chew</b> , <i>University of Malaya, Malaysia</i>
18:10-18:35		<b>Title:</b> <i>Evidence of strong Exchange Bias in Fe doped NiCr<sub>2</sub>O<sub>4</sub> Nanoparticles: XRD, EXAFS and Magnetic Measurements</i>
		<b>Chandana Rath</b> , <i>Indian Institute of Technology, India</i>
18:35-19:00		<b>Title:</b> <i>Tuning Magnetism in 2D - TiSe<sub>2</sub> Hexagonal Nanostructures by Au Impurities</i>
		<b>Pratap Kumar Sahoo</b> , <i>National Institute of Science Education and Research, India</i>

## End of Day1

**Day 2, April 19, 2022**

**Virtual Presentations**

**Starts @ London, UK Time Zone (GMT)**

09:00-09:10		<b>Introduction</b>
09:10-09:35		<b>Title:</b> Field Induced Quantum Phase Transitions in One-Dimensional Spin-1/2 Heisenberg Antiferromagnet.
		<b>Ramesh Chandra Nath</b> , <i>Indian Institute of Science Education and Research Thiruvananthapuram, India</i>

<b>09:35-10:15</b>	<b>P</b>	<b>Title:</b> Multifunctional Magnetic Nanostructures for Biomedical Applications
		<b>Jose Rivas</b> , <i>University of Santiago de Compostela, Spain</i>
<b>10:15-10:55</b>	<b>P</b>	<b>Title:</b> Anisometric Fe <sub>3</sub> O <sub>4</sub> Nanoparticles as Versatile Theranostic Agents.
		<b>Joseph Nogues</b> , <i>Catalan Institute of Nanoscience and Nanotechnology, Spain</i>
<b>10:55-11:35</b>	<b>P</b>	<b>Title:</b> Development of Soft Magnetic Microwires for Technological Applications.
		<b>Arcady Zhukov</b> , <i>University of Basque Country and Ikerbasque, Spain</i>
<b>11:35-12:15</b>	<b>P</b>	<b>Title:</b> The Use of Magnetic Nanoparticles in Tissue Engineering : An Alternate Magnetic Bioprinting Strategy?
		<b>Claire Wilhelm</b> , <i>CNRS, France</i>
<b>12:15-12:45</b>	<b>K</b>	<b>Title:</b> Current-Induced Control of Chiral Magnetic Textures in Magnetic Insulators
		<b>Saül Vélez</b> , <i>Autonomous University of Madrid, Spain</i>
<b>12:45-13:15</b>	<b>K</b>	<b>Title:</b> Magnetic Dipolar Modes in Magnon-Polariton Condensates.
		<b>Eugene Kamenetskii</b> , <i>Ben Gurion University of the Negev, Israel</i>
<b>13:15-13:45</b>	<b>K</b>	<b>Title:</b> Collective vs Individual-like Behaviour in Conventional and Binary Nanoparticle Systems.
		<b>Jose Angel De Toro Sanchez</b> , <i>University of Castilla-La Mancha, Spain</i>
<b>13:45-14:10</b>	<b>I</b>	<b>Title:</b> Soft Magnetic Alloys and Composites.
		<b>Suñol Martínez</b> , <i>University of Girona, Spain</i>
<b>14:10-14:35</b>	<b>I</b>	<b>Title:</b> Topological Protected Structures for Magnetic Sensors and Storage Applications.
		<b>Dieter Suess</b> , <i>University of Vienna, Austria</i>
<b>14:35-15:00</b>	<b>I</b>	<b>Title:</b> Hidden Spin-Texture at Topological Domain Walls Drive Exchange Bias in a Weyl Semimetal.
		<b>Yonathan Anahory</b> , <i>Hebrew University of Jerusalem, Israel</i>
<b>15:00-15:25</b>	<b>I</b>	<b>Title:</b> Magneto-Optical Measurements of Weyl Semimetals
		<b>Dima Cheskis</b> , <i>Ariel University, Israel</i>
<b>15:25-15:50</b>	<b>I</b>	<b>Title:</b> Global and Local Magnetism in Semiconductors with Nearly Atomistic Confinement
		<b>Efrat Lifshitz</b> , <i>Technion- Israel Institute of Technology, Israel</i>
<b>15:50-16:15</b>	<b>I</b>	<b>Title:</b> Magnetoelastic Biosensors.
		<b>Selcuk Atalay</b> , <i>Inonu University, Turkey</i>
<b>16:15-16:40</b>	<b>I</b>	<b>Title:</b> XMCD Investigation of Canted Magnetic Order in Compensated Ferrimagnetic Half-Metal
		<b>Katarzyna Siewierska</b> , <i>Trinity College, Ireland</i>
<b>16:40-17:05</b>	<b>I</b>	<b>Title:</b> Evaluation of the Performance of Colloidal Dispersions of Magnetic Ferrofluids in a High-Efficiency Thermal Switch System
		<b>Vivian Andrade</b> , <i>University of Porto, Portugal</i>

17:05-17:30	I	<b>Title:</b> Sub-THz Magnetic Polariton in the Strong Coupling Regime.
		<b>Jean-Philippe Ansermet</b> , <i>EPFL, Switzerland</i>
17:30-17:55	I	<b>Title:</b> Lifetime and Transition Mechanisms of Skyrmions and Antiskyrmions in Ferromagnets and Antiferromagnets
		<b>Hannes Jónsson</b> , <i>University of Iceland, Iceland</i>
17:55-18:20	I	<b>Title:</b> Quantum Magnonics : When Magnon Spintronics Meets Quantum Information Science.
		<b>Huaiyang Yuan</b> , <i>Utrecht University, Netherlands</i>
18:20-18:50	K	<b>Title:</b> Insight into Martensitic Transformation of Shape-Memory Heusler Films : Thickness, Lateral Size, Artificial Deformation and Microstructure Effects
		<b>Milad Takhsha</b> , <i>IMEM-CNR, Italy</i>
18:50-19:30	P	<b>Title:</b> Ferrimagnetic Spin Electronics
		<b>Michael Coey</b> , <i>Trinity College, Ireland</i>

**End of Day2**

**Day 3, April 20, 2022**

**Virtual Presentations**

**Starts @ Chicago, USA Time Zone (UTC-5) CDT**

09:00-09:10		<b>Introduction</b>
09:10-09:35	I	<b>Title:</b> Nanofabrication Techniques : a Powerful Tool to Pattern Magnetic Layers.
		<b>Paola Maria Tiberto</b> , <i>National Institute of Metrological Research, Italy</i>
09:35-10:00	I	<b>Title:</b> Tension-Free Dirac Strings and Steered Magnetic Charges in 3D Artificial Spin Ice
		<b>Sabri Koraltan</b> , <i>University of Vienna, Austria</i>
10:00-10:30	K	<b>Title:</b> Plasmon-Assisted Opto-Thermal Excitation of Frustrated Nanomagnetic Arrays for Nanomagnetic Logics.
		<b>Paolo Vavassori</b> , <i>CIC nanogune, Spain</i>
10:30-10:55	I	<b>Title:</b> <i>In-Silico Design of Magnetic Materials</i>
		<b>Hongbin Zhang</b> , <i>Darmstadt University of Technology, Germany</i>
10:55-11:20	I	<b>Title:</b> <i>Unveiling Valley Lifetimes of Free Charge Carriers in Monolayer WSe<sub>2</sub></i>
		<b>Bernd Beschoten</b> , <i>RWTH Aachen University, Germany</i>
11:20-12:00	P	<b>Title:</b> New Trends in Two-Dimensional Quantum Magnetism.
		<b>Manh-Huong Phan</b> , <i>University of South Florida, USA</i>
12:00-12:40	P	<b>Title:</b> Introducing Nanomaterials' Parameters for Mathematical Modeling in Vitro and in Vivo assays.
		<b>Paulo Cesar De Moraes</b> , <i>University of Brasilia, Brazil</i>
12:40-13:10	K	<b>Title:</b> Ferrimagnets as Desirable Skyrmionic Materials.
		<b>Joseph Poon</b> , <i>University of Virginia, USA</i>

13:10-13:35	I	<b>Title:</b> Will be Updated Soon.
		<b>Dustin Gilbert</b> , <i>University of Tennessee, USA</i>
13:35-14:00	I	<b>Title:</b> A Spectroscopic Investigation of MnBi <sub>2</sub> Te <sub>4</sub> .
		<b>Jun Yan</b> , <i>University of Massachusetts Amherst, USA</i>
14:00-14:25	I	<b>Title:</b> Tuning the Magnetic Transition in Fe <sub>3</sub> Ga <sub>4</sub> for Antiferromagnetic Spintronics
		<b>Michelle E Jamer</b> , <i>United States Naval Academy, USA</i>
14:25-14:50	I	<b>Title:</b> One New Direction : the Spin Phononics.
		<b>José Holanda</b> , <i>Federal University of Espírito Santo, Brazil</i>
14:50-15:15	I	<b>Title:</b> Tuning the Magnetic Properties and the Catalytic Activity of Bifunctional Nanoparticles
		<b>Elin L. Winkler</b> , <i>Institute of Nanoscience and Nanotechnology CNEA-CONICET, Argentina</i>
15:15-15:40	I	<b>Title:</b> Anisotropy and Magnetization of Mn <sub>3</sub> Ga Thin Films Grown on Various Substrates.
		<b>Sion F. Olive-Méndez</b> , <i>Research Center of Advanced Materials, Mexico</i>
15:40-16:05	I	<b>Title:</b> Universality and the Thermoelectric Transport Properties Through Quantum Dots Systems : Seeking for Conditions that Could Improve the Efficiency
		<b>Roberto Franco Peñaloza</b> , <i>Universidad Nacional de Colombia, Colombia</i>

**End of Virtual Presentations**





# MAGNETISMMMEET2023

MARCH 16-18, 2023 | ROME, ITALY

2<sup>ND</sup> INTERNATIONAL MEET ON MAGNETISM AND MAGNETIC MATERIALS