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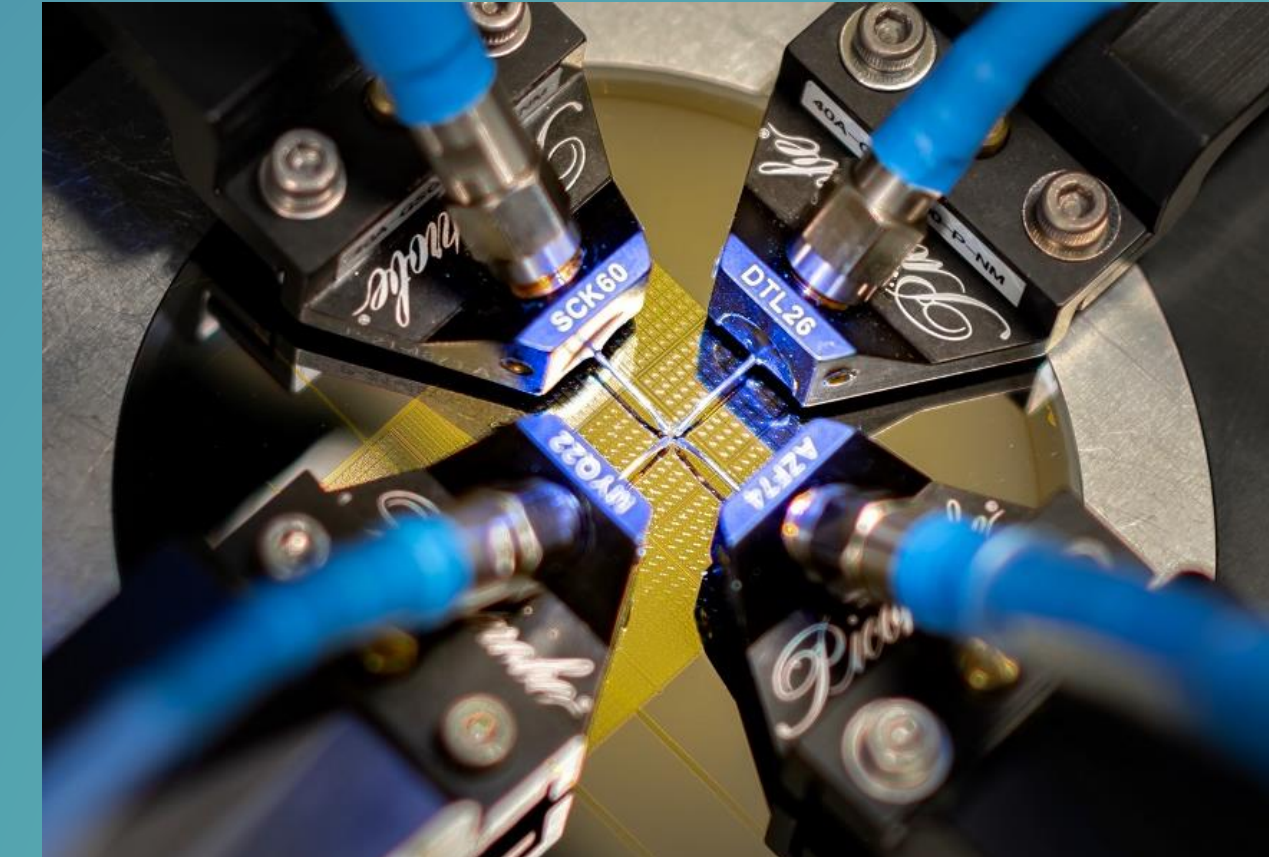
Graduate Program
in Spintronics

The 1st Young Scholars Workshop in Spintronics

Frontier research from fundamental to application

Outline

Welcome to The 1st Young Scholars Workshop in Spintronics! We are thrilled to announce this exciting event, dedicated to sharing the latest research in the field of spintronics, from fundamental research to practical applications. This workshop provides a unique platform for young scholars and researchers to come together and exchange knowledge, ideas, and discoveries in spintronics. Our goal is to foster collaboration, inspire innovation, and accelerate the development of cutting-edge technologies in this field.



Tutorial Speakers



Prof. Yoshichika Otani

The Univ of Tokyo
東京大学

10:00~10:40

Spin conversion phenomena and their new directions



Prof. Bethanie Stadler

The Univ of Minnesota
UNIVERSITY OF MINNESOTA

10:40~11:20

Exploring the potential of garnet films and magnetic nanowires for future Spintronics materials



Prof. Guoqiang Yu

Institute of Physics CAS
中国科学院物理研究所

11:20~12:00

Progress on magnetic skyrmions in thin-film heterostructures

Young Scholars

Session1: Fundamental research of spintronics

<i>Mingxing Wu</i>	Current-driven magnetic octupole domain-wall dynamics in noncollinear antiferromagnets	13:00~13:30
<i>Yoon Ju-Young</i>	Handedness anomaly in the octupole dynamics of a non-collinear antiferromagnet driven by spin-orbit torque	13:30~14:00
<i>Yuta Kimoto</i>	Electric current induced resistivity anomaly in a helimagnet: indication of sliding motion	14:00~14:30

Session2: Potential of practical magnetic devices

<i>Nguyen Thi Van Anh</i>	Spin current generation in collinear antiferromagnet RuO ₂ with triple-domain structure	15:00~15:30
<i>Bernard Guillaume</i>	Advanced Magneto-Ionic Devices for Neuromorphic Computing Applications	15:30~16:00
<i>Ryutaro Kikuchi</i>	Magnetic tunnel junctions using L1 ₀ -(MnCo)Al electrode and MgAl ₂ O ₄ tunnel barrier	16:00~16:30

Session3: Applied research of spintronics

<i>Tao Li</i>	Bridging Artificial Intelligence and Spintronics: Power Reduction Method of STT-MRAM with Error-resilient Deep Neural Networks	16:30~17:00
<i>Fangcen Zhong</i>	High Adaptive Power-Gating System for STT-MRAM	17:00~17:30
<i>Tappei Kawakami</i>	Charge-density wave phase in monolayer VS ₂ studied by ARPES	17:30~18:00

Venue & Contact (Hybrid)

Place: Seminar Room, 2F AIMR Main Building, Katahira Campus

Zoom link: <https://zoom.us/j/95079996980?pwd=YVVGUk1FempwNU9XWkF3RUhWd1YwQT09>

Contact: zhang.li.q2@dc.tohoku.ac.jp

Registration & Information

Website: <https://gp-spin.tohoku.ac.jp/en/ysws/>

Spintronics Workshop

2023, July, 06 Thursday (09:55~18:00)

This workshop is supported by GP-Spin, Tohoku University.



Co-hosted by AIMR