



GP-Spin Student Organized Seminar
2020

February 20th - 21st, 2020
Advanced Institute for Materials Research,
Katahira Campus, Tohoku University

Program

February 20th (Thu.) 2020

9:00 - 9:20 Registration (Seminar Room, AIMR 2F)

9:20 - 9:30 Opening Remarks

Spin Transport and Dynamics (Chair: Shogo Yamashita)

9:30 - 9:50 **Hiroki Arisawa**

Spin pumping under magnetic field gradient

9:50 - 10:10 **Hiroto Masuda**

Antiferromagnetically-coupled metallic superlattice with Ir-doped Cu interlayer generating spin Hall effect

10:10 - 10:30 **Akihiro Ozawa**

Ferromagnetic Weyl semimetal phase and magnetic transport properties in Kagome-lattice shandite

10:30 - 10:50 **Coffee Break**

Novel Spintronics Materials (Chair: Hiroki Arisawa)

10:50 - 11:30 **Kohei Yoshimatsu**

Investigation of Electronic and Magnetic Properties for Complex Transition-Metal Oxides using Soft X-ray Spectroscopy

11:30 - 11:50 **Juyoung Yoon**

Crystal Structure and Anomalous Hall Effect of Sputter-deposited Epitaxial Mn_3Sn Thin Films

11:50 - 12:10 **Daichi Saito**

Thickness Dependence of Magnetotransport Properties of Rocksalt NdO Epitaxial Thin Films

12:10 - 13:40 **Photo Session and Lunch**

Surficial and Interfacial Magnetism (Chair: Daichi Saito)

- 13:40 - 14:00 **Hirofumi Oka**
Spatially resolved magnetic anisotropy of Co nanostructures
- 14:00 - 14:20 **Wang Yihao**
*Imaging the quantum Hall incompressible strip
influenced by disorder*
- 14:20 - 14:40 **Coffee Break**

Laboratory Tour

- 14:40 - 16:00 **Advanced Institute for Materials Research**
- 16:00 - 17:00 **Research Institute of Electrical Communication**

Poster Session

- 17:30 - 20:00 **Poster Session and Dinner (Combination Room, AIMR 5F)**

February 21st (Fri.) 2020

Spin-Orbit Interaction (Chair: Jan-Erik Reinhard Wichmann)

- 10:00 - 11:00 **Luqiao Liu** (Invited Lecture)
Magnonics for Wave-Based Computing
- 11:00 - 11:20 **Coffee Break**
- 11:20 - 11:40 **Keita Nakagawara**
Enhancement of spin Hall angle in CuPt alloy systems
- 11:40 - 12:20 **Justin Tony Hou**
Hybridized Magnons in Van der Waals Antiferromagnets and Circuit Quantum Electrodynamics
- 12:20 - 13:50 **Free Discussion and Lunch**

Topological Spin Transport (Chair: Hui Shen)

- 13:50 - 14:50 **Oleg A. Tretiakov** (Invited Lecture)
Topological Spintronics with (Anti)Skyrmions and Bimerons
- 14:50 - 15:10 **Coffee Break**
- 15:10 - 15:30 **Se Hoon Kim**
Theoretical study of spin torque and domain wall motion on ferromagnetic Kagome lattice
- 15:30 - 15:50 **Katsuya Konno**
Alkali metal intercalation effect on a Kitaev spin liquid candidate material α -RuCl₃
- 15:50 - 16:10 **Jan-Erik Reinhard Wichmann**
Majorana Zero Modes in Dirac Semimetal Heterostructures
- 16:10 - 16:20 Closing Remarks

Poster Session

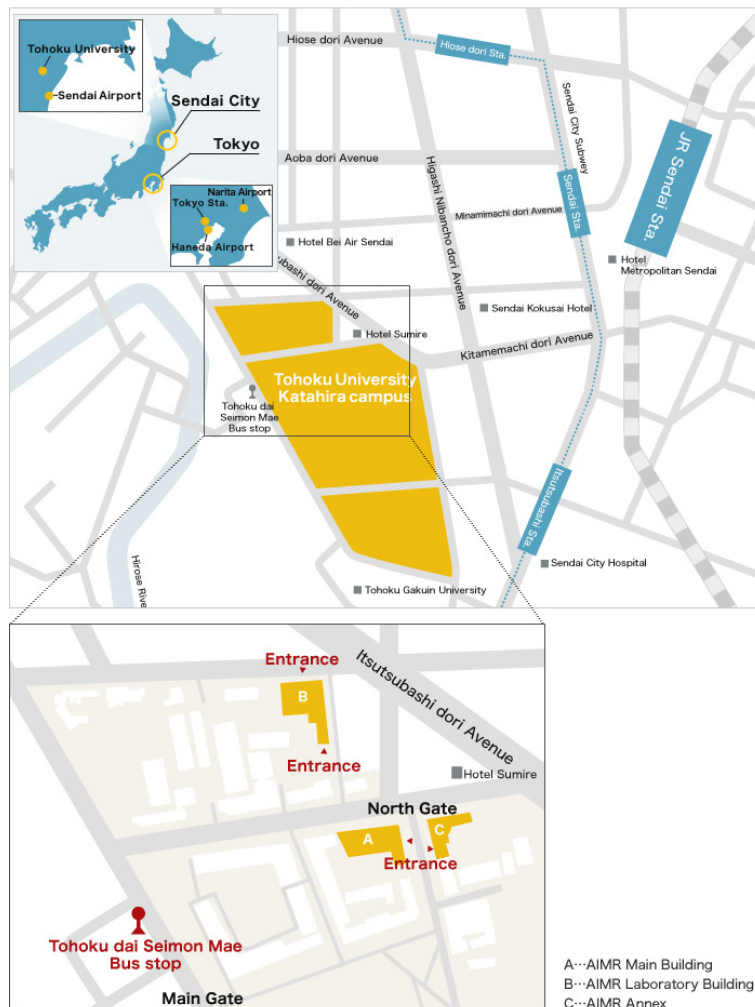
- P1 **Daichi Saito**
Magnetotransport Properties in Rocksalt NdO/EuO Heterojunction
- P2 **Hui Shen**
A Novel Cluster Validity Index using Global Separation and Local Dispersion for High Accuracy Image Classification
- P3 **Koichi Oyanagi**
Spin Transport in Paramagnetic Insulators
- P4 **Muhamad Arif Ihsan Bin Mohdnoor Sam**
Magnetic Tunnel Junction Sensor based Non-Destructive Testing
- P5 **Qixian Liao**
Spin relaxation mechanism in topological materials Bi_4Te_3 and Bi_2Te_3
- P6 **Tetsu Sato**
Structure and magnetic properties of Dy-phthalocyanato double decker complexes
- P7 **Yifei Tang**
Possible Vector Chiral Vortex in the Two-Dimensional Triangular Antiferromagnet: $FeGa_2S_4$
- P8 **Yuan Tian**
Scaling laws on enhancement of the electric field inside a hollow cylinder
- P9 **Yuta Yahagi**
Theoretical Study of the Spin-current Induced by s-d scattering in Ferromagnetic Metals

Access

Conference Site

2F Seminar Room (2B), AIMR Main Building (B01), Katahira Campus,
Tohoku University

2-1-1 Katahira, Aoba-ku, Sendai, 980-8577 Japan

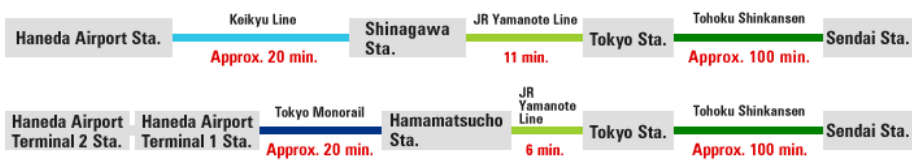


All information taken from <https://www.wpi-aimr.tohoku.ac.jp/en/about/access/>

From Narita Airport



From Haneda Airport



From Sendai Airport



From Sendai Station

By foot

Approx. 15 min. work from the West Exit of Sendai Station

By taxi

Approx. 10 min. by taxi from the West Exit on the first floor of Sendai Station