

WPI-AIMR workshop
Topological Functional Materials and Devices

Nov. 30th – Dec. 1st

WPI main building

Tohoku University, Sendai, Japan

Schedule: Nov. 30th

1st floor seminar room in WPI main building

12:55 - 13:00 Greeting

Session 1

13:00 - 13:50 **Philip Hofmann** (Aarhus University)

“Electronic Structure of the Topological Insulator Bi₂Se₃”

13:50 - 14:40 **Makoto Kohda** (Dept. of Material Science, Tohoku University)

“Spin-orbit induced electronic spin separation in semiconductor nanostructures”

14:40 - 15:05 **Yoichi Tanabe** (WPI-AIMR, Tohoku University)

“Carrier control via charge transfer at the topological-insulator/organic-molecules interface”

15:05-17:30 Back to hotel

Lab. tour and/or Discussion

17:30 – 19:30 Dinner / Discussion

Schedule: Dec. 1st

1st floor seminar room in WPI main building

Session 2

9:00 - 9:50 **Hartmut Buhmann** (Universität Würzburg)

“HgTe, at Topological Insulator”

9:50 - 10:15 **Shigemi Mizukami** (WPI-AIMR, Tohoku University)

“Spin damping in ultrathin magnetic layer / normal metals with large spin-orbit interaction”

10:15 - 10:45 Break

Session 3

10:45 - 11:35 **Gen Tatara** (Tokyo Metropolitan University)

title, TBD

11:35 – 12:00 WPI researcher; TBD

12:00 - 13:00 Lunch

Session 4

13:00 - 13:50 **Ronald Jansen** (AIST)

“Seebeck spin tunneling”

13:50 - 14:40 **Daichi Chiba** (Kyoto University)

“Electrical control of ferromagnetic Curie temperature in Co ultra-thin films”

14:40 - 15:05 **Fumihiko Matsukura** (WPI-AIMR, Tohoku University)

“Magnetization reversal of CoFeB induced by the application of electric fields”

15:05 - 15:35 Break

Session 5

15:35 - 16:00 **Seigo Souma** (WPI-AIMR, Tohoku University)

“Spin-resolved ARPES on topological insulators”

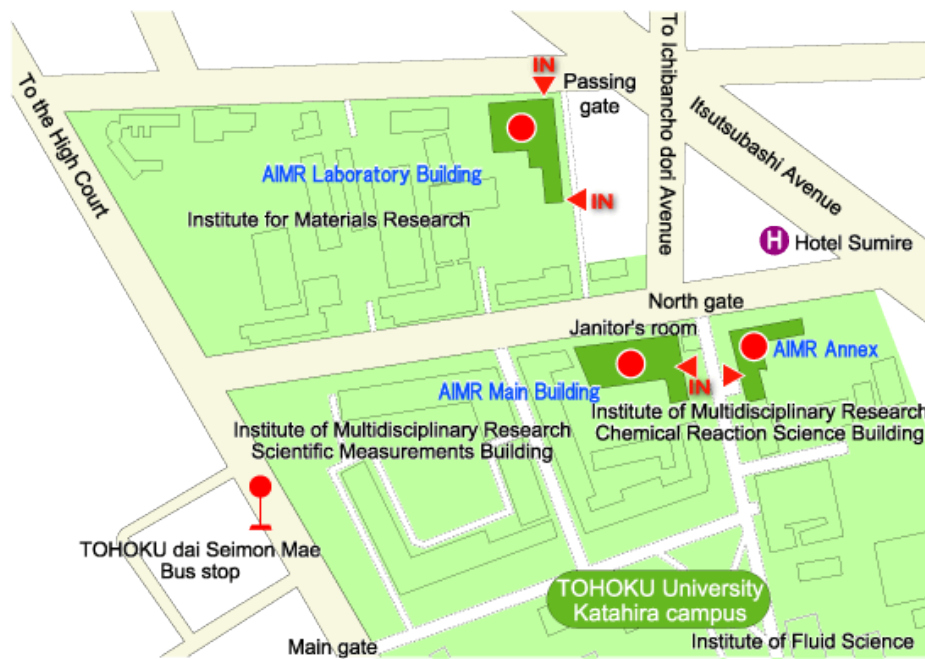
16:00 - 16:50 **Shuichi Murakami** (Tokyo Institute of Technology)

“Topological edge and surface states and spin transport”

16:50-17:00 Closing

Organizers; Katsumi Tanigaki, Takashi Takahashi, Fumihiko Matsukura, Shigemi Mizukami,
Seigo Souma

Contact person; Seigo Souma [s.souma@arpes.phys.tohoku.ac.jp]



WPI-AIMR: Katahira campus, Tohoku University,
2-1-1 Katahira, Aoba-ku, Sendai, 980-8577, Japan
(81) 22-217-5922
<http://www.wpi-aimr.tohoku.ac.jp/en/index.html>