

Tohoku-Purdue Workshop on Novel Spintronics Physics and Materials for Future Information Processing



Date: February 18 (Sun), 2018

Venue: A401, Laboratory for Nanoelectronics and Spintronics, Research Institute of Electrical Communication, Tohoku University

Organized by

Laboratory for Nanoelectronics and Spintronics, Research Institute of Electrical Communication (RIEC), Tohoku University
 World Leading Research Center for Spintronics, Tohoku University
 Center for Spintronics Integrated Systems (CSIS), Tohoku University
 Center for Spintronics Research Network (CSRN), Tohoku University
 WPI-Advanced Institute for Materials Research (WPI-AIMR), Tohoku University
 Graduate Program in Spintronics (GP-Spin), Tohoku University
 Spintronics Preeminent Team and Birck Nanotechnology Center, Purdue University

9:00-9:05	Opening (Hideo Ohno)	
9:05-9:40	Takafumi Sato (Tohoku)	Spin-resolved ARPES study of novel topological materials
9:40-10:15	Yong Chen (Purdue/Tohoku)	Spintronics meets topological insulators and other quantum materials
10:15-10:50	Yoshiro Hirayama (Tohoku)	Resistively-detected NMR in semiconductor quantum systems
10:50-11:10	Break	
11:10-11:45	Ernesto Marinero (Purdue)	Magneto-Photonics: Confluence of Spins and Photons, Novel Physics and Devices
11:45-12:20	Shigemi Mizukami (Tohoku)	Nano-layered structure based on TM-Ga (TM = Mn,Co) alloys
12:20-13:50	Lunch	
13:50-14:25	Kerem Camsari (Purdue)	p-bits, p-transistors and p-circuits
14:25-15:00	Shunsuke Fukami (Tohoku)	Analog spin-orbit torque devices for edge AI hardware
15:00-15:15	Break	
15:15-15:50	Kaushik Roy (Purdue)	Fast and Efficient Solution to Dynamical Systems using Stochastic Switching of Nano-magnets
15:50-16:25	Tetsuo Endoh (Tohoku)	Nonvolatile Brain-Inspired VLSIs Based on CMOS/MTJ Hybrid Technology
16:25-16:30	Closing (Hideo Ohno)	

● Registration

The workshop is free of charge and registration is not required.

● Series Symposium and Workshop

The workshop will be followed by the "Kick-off Symposium for World Leading Research Centers – Material Science and Spintronics" to be held on Feb. 19-20 and "Tohoku/SG-Spin Workshop on Spintronics" to be held on Feb. 20-21.

● Committee

H. Ohno, Y. Chen, Y. Hirayama, S. Fukami

● Secretariat

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