

15th RIEC International Workshop on Spintronics

Program

● December 13 (Wednesday)

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9:00-9:10		
Opening	H. Ohno (Tohoku University)	
9:10-9:40		
We-1	L. Liu (Massachusetts Institute of Technology)	13
	<i>Magnetic Switching with Topological Insulator and Compensated Ferrimagnet</i>	
9:40-10:10		
We-2	M. Hayashi (University of Tokyo)	14
	<i>Spin current generation in transition metal bilayers and multilayers</i>	
10:10-10:30		
We-3	W. A. Borders (Tohoku University)	15
	<i>An Artificial Neural Network Built with Analogue Spin-Orbit Torque Devices</i>	
10:30-10:50		
Break		
10:50-11:20		
We-4	C. Lai (National Tsing Hua University)	16
	<i>Multilevel-state and unidirectional switching driven by spin-orbit torque</i>	
11:20-11:50		
We-5	K. Yasuda (University of Tokyo)	18
	<i>Spintronic functionalities of magnetic topological insulators</i>	
11:50-12:00		
Photo		
12:00-13:50		
Lunch		

13:50-14:20

We-6 S. Fukami (Tohoku University)

Sub-nanosecond field-free spin-orbit torque switching

14:20-14:50

We-7 W. S. Lew (Nanyang Technological University)

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Characterizing spin-orbit torque effective fields and spin accumulation

14:50-15:20

We-8 S. Mizukami (Tohoku University)

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Recent research progress on MnGa alloy nano-layer for spintronics

15:20-15:40

Break

15:40-16:10

We-9 S. Miwa (Osaka University)

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Voltage-controlled magnetic anisotropy through multipole induction in platinum

16:10-16:40

We-10 B. Terris (Western Digital Research)

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Recent Advances in MRAM Technology

16:40-17:30

Transfer

17:30-19:30

Banquet (Joint RIEC/ Core to Core)

● December 14 (Thursday)

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Th-1	T. Devolder (Université Paris-Sud)	23
	<i>Device-level spin-wave spectroscopy for the understanding of nanosecond-scale STT switching in perpendicularly magnetized STT-MRAM cells</i>	
9:30-9:50		
Th-2	K. Watanabe (Tohoku University)	24
	<i>High Performance Single-Digit-Nanometer Perpendicular Magnetic Tunnel Junctions</i>	
9:50-10:20		
Th -3	A. Maziewski (University of Bialystok)	25
	<i>Brillouin Light Scattering studies of magnetic excitations in patterned films</i>	
10:20-10:40		
Break		
10:40-11:10		
Th-4	C. Panagopoulos (Nanyang Technological University)	26
	<i>A Platform for Tuning and Studying the Properties of Room Temperature Skyrmions</i>	
11:10-11:40		
Th -5	S.-B. Choe (Seoul National University)	27
	<i>Dzyaloshinskii-Moriya Interaction and Domain-Wall Dynamics in Ferromagnetic Thin Films</i>	
11:40-12:10		
Th -6	C. Donnelly (ETH Zürich)	28
	<i>Revealing buried magnetic configurations with hard X-ray magnetic nanotomography</i>	
12:10-14:00		
Lunch		
14:00-15:30		
Poster		

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Th -7	M. Kläui (Johannes Gutenberg-University Mainz)	29
	<i>Spin – Orbitronics: chiral spin dynamics due to spin-orbit effects</i>	
16:00-16:30		
Th -8	S. Nakatsuji (University of Tokyo)	30
	<i>Anomalous Transport Properties of Weyl Antiferromagnets</i>	
16:30-17:00		
Th -9	J. Åkerman (University of Gothenburg)	31
	<i>Mutually Synchronized Chains and Two-Dimensional Spin Hall Nano-Oscillator Arrays</i>	
17:00-17:10		
Closing	H. Ohno (Tohoku University)	