

The 2nd ASRC International Workshop on Magnetic Materials and Nanostructures
PROGRAM

January 10 (Tuesday)		January 11 (Wednesday)		January 12 (Thursday)		January 13 (Friday)	
		9:00	K. Takanashi	9:00	J. Kono	9:00	S. Uchida
		9:30	H. Yang	9:30	T. Jungwirth	9:30	K. Yamada
10:00	Opening	10:00	G. Tatara	10:00	C. Q. Jin	10:00	E. Morenzoni
10:10	S. Parkin	10:30	COFFEE	10:30	COFFEE	10:30	COFFEE
10:40	T. Ono	10:50	M. Klaui	10:50	Y. J. Uemura	10:50	P. Roushan
11:10	S. Yuasa	11:20	S. E. Barnes	11:20	S. Maekawa	11:20	Y.Y. Wang
11:40	S. D. Bader	11:50	H. Kohno	11:50	H. Munekata	11:50	T. Hanaguri
12:10		12:20	PHOTO	12:20		12:20	
	LUNCH		LUNCH		LUNCH		LUNCH
14:00	Y. Otani	14:00	E. Saitoh	14:00	X.Z. Yu	14:00	W.Q. Yu
14:30	T. Kimura	14:30	H. Adachi	14:30	Y. Onose	14:30	S. R. Dunsiger
15:00	R. Jansen	15:00	J. P. Heremans	15:00	C. Pappas	15:00	M. Takigawa
15:30	J. Sinova	15:30	G. E. W. Bauer	15:30	C. Pfleiderer	15:30	T. Fennell
16:00	COFFEE	16:00	COFFEE	16:00	COFFEE	16:00	A. Wildes
16:30	C. Felser	16:30	S. Kasai	16:30	S. Onoda	16:30	Closing
17:00	S. Murakami	17:00	E. Y. Tsybal	17:00	T. Goko		
17:30	X. F. Jin	17:30	M. Tanaka	17:30	P. Fulde		
18:00	N. Nagaosa	18:00	I. Zutic	18:00			
18:30		18:30		18:30			
19:00				19:00			
	Reception			19:30	Banquet @ President-Hotel Mito		
20:00							

10th(Tue)			page
	chair	S. Maekawa	
10:00-10:10		T. Ziman	Opening
10:10-10:40		S. Parkin	Racetrack Memory 2.0: a high-performance, storage class memory using magnetic domain-walls manipulated by current
10:40-11:10		T. Ono	Intrinsic pinning of a magnetic domain wall in a ferromagnetic nano-wire
11:10-11:40		S. Yuasa	Perpendicularly magnetized magnetic tunnel junctions for high-density non-volatile memory
11:40-12:10		S. D. Bader	Spintronics – Implications for Energy, Information and Medical Technologies
		Lunch	(12:10-14:00)
	chair	T. Shinjo	
14:00-14:30		Y. Otani	Strongly enhanced spin accumulation and long distance spin manipulation in non-local spin valves
14:30-15:00		T. Kimura	Efficient generation and absorption of pure spin current in metallic nanostructures
15:00-15:30		R. Jansen	Recent progress in silicon spintronics
15:30-16:00		J. Sinova	Spin Hall FET
		Coffee	(30 minutes)
	chair	T. Ziman	
16:30-17:00		C. Felser	Design of new tetragonal multifunctional Heusler compounds for spin transfer torque applications
17:00-17:30		S. Murakami	Heat transport in spin-orbit coupled systems
17:30-18:00		X. F. Jin	Temperature Dependence of the Intrinsic Anomalous Hall Effect in Nickel
18:00-18:30		N. Nagaosa	Theoretical design of Topological Phenomena
19:00-20:30	Reception	Ricotti	

11th(Wed)			page
	chair	S. Sakai	
9:00-9:30		K. Takanashi	Impurity and Thickness dependence of Giant Spin Hall Effect in Perpendicularly Magnetized FePt/Au Multi-Terminal Devices 23
9:30-10:00		H. Yang	The Kondo effect in heavily hole-doped single layer graphene 24
10:00-10:30		G. Tatara	Monopoles in the spin pumping + inverse spin Hall system 25
		Coffee	(20 minutes)
	chair	H. W. Lee	
10:50-11:20		M. Klauwi	Spin current – induced magnetization dynamics 26
11:20-11:50		S. E. Barnes	Origin of spin-motive-forces and spin SU(2) fields 27
11:50-12:20		H. Kohno	Microscopic Study of Spin Motive Force 28
		Lunch	(12:20-14:00)
	chair	I. Zutic	
14:00-14:30		E. Saitoh	Spin current generation from magnetic dynamics and heat 29
14:30-15:00		H. Adachi	Phonon-driven spin Seebeck effect 30
15:00-15:30		J. P. Heremans	The spin-Seebeck effect in GaMnAs 31
15:30-16:00		G.E.W. Bauer	Spin caloritronics from scattering theory 32
		Coffee	(30 minutes)
	chair	J. Martinek	
16:30-17:00		S. Kasai	RF voltage response induced by waveguide FMR in ferromagnetic/non-magnetic bi-layers 33
17:00-17:30		E. Y. Tsybal	Magnetoelectric Interfaces and Spin Transport 34
17:30-18:00		M. Tanaka	A new Fe-based n-type electron-induced ferromagnetic semiconductor: (In,Fe)As 35
18:00-18:30		I. Zutic	Tailoring Spin and Magnetism in Quantum Dots 36

12th(Thu)			page
	chair	Y. J. Uemura	
9:00-9:30	J. Kono	High-Field Magneto-optics in Carbon Nanomaterials	37
9:30-10:00	T. Jungwirth	Spintronics with Antiferromagnets	38
10:00-10:30	C. Q. Jin	Ferromagnetic Semiconductor Li(Zn,Mn)As	39
	Coffee	(20 minutes)	
	chair	E. Y. Tsybal	
10:50-11:20	Y. J. Uemura	Muon Spin Relaxation Studies of Li(Zn,Mn)As and (Ga,Mn)As	40
11:20-11:50	S. Maekawa	Materials Design of Magnetic Semiconductors -Quantum Monte Carlo Study-	41
11:50-12:20	H. Munekata	Optically induced precession of magnetization in ferromagnetic semiconductors and related structures	42
	Lunch	(12:20-14:00)	
	chair	K. Kakurai	
14:00-14:30	X. Z. Yu	Real-space observation of skyrmion crystal	43
14:30-15:00	Y. Onose	Topological Hall effects of electrons and magnons	44
15:00-15:30	C. Pappas	From Liquid Crystals to Chiral Magnets	45
15:30-16:00	C. Pfleiderer	Spin Transfer Torques at Ultra-Low Current Densities	46
	Coffee	(30 minutes)	
	chair	T. Sakai	
16:30-17:00	S. Onoda	Emergent anomalous Hall effect in a pyrochlore spin liquid and intrinsic skyrmion Hall effect in double-exchange ferromagnets	47
17:00-17:30	T. Goko	Elucidating hidden quantum critical point of (Mn,Fe)Si in applied pressure	48
17:30-18:00	P. Fulde	Frustrated electron systems: From heavy quasiparticles to quantum ice	49
19:30-	Banquet	President-Hotel Mito	

13th(Fri)			page
	chair	Y. Endoh	
9:00-9:30		S. Uchida	In-Plane Anisotropy in Iron Arsenides 50
9:30-10:00		K. Yamada	Spin pseudogap and dual nature of spin dynamics in high-Tc cuprates 51
10:00-10:30		E. Morenzoni	Local superconducting and magnetic properties of $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ heterostructures 52
Coffee (20 minutes)			
	chair	J. Bonca	
10:50-11:20		P. Roushan	Visualizing critical correlations near the metal-insulator transition in $\text{Ga}_{1-x}\text{Mn}_x\text{As}$ 53
11:20-11:50		Y. Y. Wang	Novel properties of magnetically doped topological insulator films grown by molecular beam epitaxy 54
11:50-12:20		T. Hanaguri	STM/STS studies of Landau quantization in a topological insulator 55
Lunch (12:20-14:00)			
	chair	W. Higemoto	
14:00-14:30		W. Q. Yu	NMR Study of Magnetism and Spin Fluctuations in Na_xFeAs , Li_xFeAs , and $\text{Li}_x(\text{Zn,Mn})\text{As}$ 56
14:30-15:00		S. R. Dunsiger	Melting Spin Ice 57
15:00-15:30		M. Takigawa	Exploring Magnetic Structures and Dynamics on the Pyrochlore Lattice by NMR 58
15:30-16:00		T. Fennell	Coulomb phases in the spin ices $\text{Ho}_2\text{Ti}_2\text{O}_7$ and $\text{Dy}_2\text{Ti}_2\text{O}_7$ 59
16:00-16:30		A. Wildes	Inelastic neutron scattering from rare-earth superlattices and thin films 60
16:30		Y. J. Uemura	Closing

Poster (throughout the workshop period)

No.	Author	Title
1	B. Al-Qadi	Thickness dependence of magnetic linear dichroism in ferromagnetic (Ga,Mn)As epitaxial layers.
2	M. Isobe	Metal-Insulator Transition in Ferromagnetic Hollandite $K_2Cr_8O_{16}$
3	Jianli Xu	Extrinsic anomalous hall effect in thin films modified by interface
4	D. Tian	Spin Hall Effect in Gold
5	D. Zheng	Li(Zn,Mn)As as a new generation ferromagnet based on a I-II-V semiconductor
6	T. Nozaki	Voltage-induced ferromagnetic resonance in an ultrathin FeCo layer
7	A. Spiesser	Enhancement of the Curie temperature by carbon doping in Mn_5Ge_3/Ge heterostructures
8	H. Saito	Electrical ciation of spin accumulation into p-type Ge
9	T. Taniguchi	Theoretical study on spin torque assisted thermal switching of synthetic free layers
10	H. Ohtori	Theoretical study of applying Andreev reflection with high- T_c superconductor to the spin-polarization measurement
11	H. Tsukahara	Theoretical study on rotation of vortex-antivortex pairs in a magnetic thin film with multi-contact
12	S. Ji.	Strong Geometrical Frustration in Fe-Oxychalcogenide
13	D. Wei	The spin Hall effect as a probe of nonlinear spin fluctuations
14	V.N. S. Rap	Low power microwave-assisted magnetization reversal in permalloy microstructures
15	M. Jamali	Enhancement of the surface spin wave asymmetric behavior in ferromagnetic nanowires
16	S. S. Mukherjee	Determining spin wave k -vectors from time-domain electrical measurements
17	S. S. Mukherjee	Bias-field dependence of spin wave interaction lengths on spin pumping signals
18	H. Hiraka	Dynamical switch of two types of magnetic fluctuations in antiferromagnetic metal $(Mn,Fe)_3Si$
19	S. Takahashi	Theory of spin relaxation in a metallic nanoparticle

No.	Author	Title
20	A. Sakai	Spin torques due to topological surface state
21	J. Shibata	Spin and charge transport induced by gauge fields in a ferromagnet
22	L. Demko	Giant magneto-optical response in non-magnetic semiconductor BiTeI with Rashba splitting
23	Y. Shiomi	Hall effect of spin-chirality origin in a triangular-lattice helimagnet Fe _{1.3} Sb
24	N. Kanazawa	Large topological Hall effect in a short-period helimagnet MnGe
25	L. D. Anh	Properties of n-type ferromagnetic semiconductor (In,Fe)As: Fe concentration and thickness dependence
26	Y. Matsumoto	Depth-resolved X-ray magnetic circular dichroism study on single layer graphene / Ni(111) structure
27	S. Entani	Precise layer-number control of graphene for spintronic applications
28	Y. Yamane	Numerical Study on Spinmotive Force Induced by Domain Wall Motion
29	T. Wakamura	Generation of large accumulation and its application to superconductivity modulation
30	B. Gu	Theory of the Spin Hall effect in a ferromagnetic metal near the Curie temperature
31	M. Matsuo	Inertial spin-orbit interaction and spin current in accelerating systems
32	J. Ieda	Spinmotive forces due to domain wall motion in shape-modulated nanowires
33	H. Onishi	Spin-orbital state in 5d transition metal oxides with strong spin-orbit coupling
34	Mari. Matsuo	Temperature dependence of Seebeck coefficient in strongly correlated multi-orbital electron systems
35	K. Tsutsui	Enhanced Spin Torque and Its Efficiency in 3D Rashba Models