



## 9<sup>th</sup> JEMS Conference 2018

Joint European Magnetic Symposia



# Preliminary Program

September, 3<sup>rd</sup> – 7<sup>th</sup>, 2018

Mainz, Germany

### Chairmen Organizing Committee

**General Chair:**

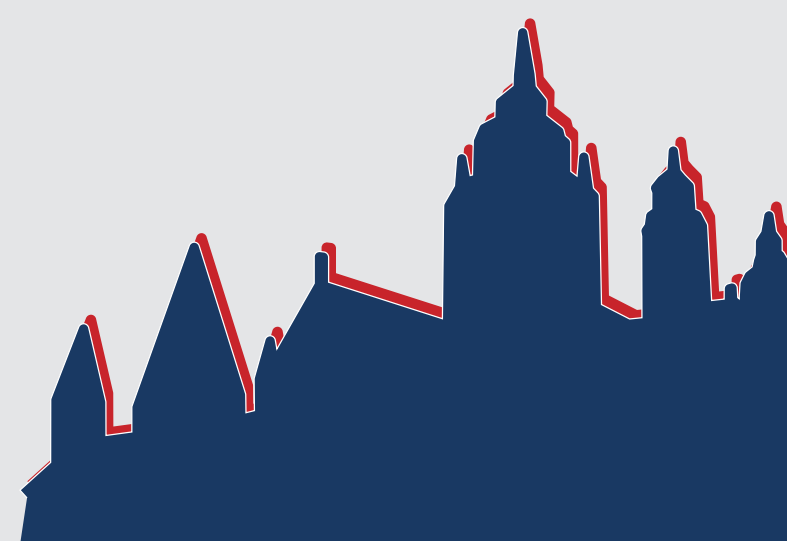
Prof. Dr. Jairo Sinova

**Co-General Chair:**

Prof. Dr. Mathias Kläui

Johannes Gutenberg

University, Mainz



# 9<sup>th</sup> JEMS Conference 2018 | Rheingoldhalle Mainz

3<sup>rd</sup> – 7<sup>th</sup> September 2018 Weekly program overview



DAY	SUNDAY	MONDAY 3.9.18	TUESDAY 4.9.18	WEDNESDAY 5.9.18	THURSDAY 6.9.18	FRIDAY 7.9.18	
TIME							
07:00	SET UP exhibition poster area lecture halls media centre registration						
07:15							
07:30							
07:45							
08:00							
08:15		Welcome Address					
08:30		Plenary Talk: Claus Ropers		Plenary Talk: Tomas Jungwirth		Plenary Talk: Geoffrey S. D. Beach	
09:15							Plenary Talk: Julie Grollier
09:20							Plenary Talk: Laura Heyderman
09:15							
09:20	Gerrit Bauer	Russell Cowburn	Luis Hueso	Russell Cowburn	Jeffrey Bokor	Amir Yacoby	
09:20					Jean-Marc Triscone	Daniel Loss	
09:20						Jagadeesh Moodera	
09:20						Dieter Suess	
10:00	Coffee Morning Break						
10:15	SP5 - Parallel Session 1	SP12 - Parallel Session 1	SP14 - Parallel Session 1	SP10 - Parallel Session 1	SP13 - Parallel Session 1	SP1 - Parallel Session 1	
10:30	SP12 - Parallel Session 1	SP14 - Parallel Session 1	SP10 - Parallel Session 1	SP13 - Parallel Session 1	SP1 - Parallel Session 1	SP12 - Parallel Session 1	
10:45	SP15 - Parallel Session 1	SP3 - Parallel Session 1	SP13 - Parallel Session 1	SP4 - Parallel Session 1	SP5 - Parallel Session 6	SP7 - Parallel Session 1	
11:00	SP8 - Parallel Session 2	SP17 - Parallel Session 2	SP18 - Parallel Session 1	SP3 - Parallel Session 2	SP15 - Parallel Session 3	SP16 - Parallel Session 1	
11:15	SP11 - Parallel Session 1	SP7 - Parallel Session 2	SP15 - Parallel Session 4	SP14 - Parallel Session 6	SP16 - Parallel Session 2	SP4 - Parallel Session 2	
11:30	SP7 - Parallel Session 2	SP15 - Parallel Session 4	SP14 - Parallel Session 6	SP16 - Parallel Session 2	SP4 - Parallel Session 2		
11:30	SP15 - Parallel Session 4	SP14 - Parallel Session 6	SP16 - Parallel Session 2	SP4 - Parallel Session 2			
11:45	SP16 - Parallel Session 2	SP4 - Parallel Session 2					
12:00	lunch break / Exhibition						
12:15	lunch break / Exhibition		lunch break / Exhibition		lunch break / Exhibition		
12:30	lunch break / Exhibition		lunch break / Exhibition		lunch break / Exhibition		
12:45	lunch break / Exhibition		lunch break / Exhibition		lunch break / Exhibition		
13:00	lunch break / Exhibition		lunch break / Exhibition		lunch break / Exhibition		
13:15	SP5 - Parallel Session 2	SP8 - Parallel Session 2	SP9 - Parallel Session 1	SP10 - Parallel Session 2	SP13 - Parallel Session 2	SP5 - Parallel Session 4	
13:30	SP5 - Parallel Session 2	SP8 - Parallel Session 2	SP9 - Parallel Session 1	SP10 - Parallel Session 2	SP13 - Parallel Session 2	SP5 - Parallel Session 4	
13:45	SP6 - Parallel Session 1	SP14 - Parallel Session 3	SP17 - Parallel Session 1	SP9 - Parallel Session 2		Gerrit Bauer	
14:00	SP6 - Parallel Session 1	SP14 - Parallel Session 3	SP17 - Parallel Session 1	SP9 - Parallel Session 2		Russell Cowburn	
14:15	SP14 - Parallel Session 3	SP17 - Parallel Session 1	SP9 - Parallel Session 2			Peter Grunberg Honorary Session	
14:30	SP9 - Parallel Session 2					SP1 - Parallel Session 2	
14:45						SP5 - Parallel Session 7	
15:00						SP14 - Parallel Session 4	
15:15						SP8 - Parallel Session 3	
15:30						SP6 - Parallel Session 2	
15:45						SP2 - Parallel Session 2	
16:00						SP3 - Parallel Session 4	
16:15						SP14 - Parallel Session 7	
16:30						SP5 - Parallel Session 9	
16:45						SP11 - PS	
17:00						/ S4 - PS3	
17:15	Coffee Afternoon Break						
17:30	Coffee Afternoon Break		Coffee Afternoon Break		Coffee Afternoon Break		
17:45	Coffee Afternoon Break		Coffee Afternoon Break		Coffee Afternoon Break		
18:00	SP5 - Parallel Session 3	SP12 - Parallel Session 2	SP14 - Parallel Session 2	SP10 - Parallel Session 3	SP13 - Parallel Session 3	SP5 - Parallel Session 5	
18:15	SP12 - Parallel Session 2	SP14 - Parallel Session 2	SP10 - Parallel Session 3	SP13 - Parallel Session 3	SP5 - Parallel Session 5	SP12 - Parallel Session 1	
18:30	SP15 - Parallel Session 2	SP3 - Parallel Session 2	SP9 - Parallel Session 3			SP15 - Parallel Session 2	
18:45	SP9 - Parallel Session 3					SP3 - Parallel Session 2	
19:00						SP9 - Parallel Session 3	
19:15						Refreshments, Exhibition, and Poster Session C	
19:30						Refreshments, Exhibition, and Poster Session C	
19:45						Refreshments, Exhibition, and Poster Session C	
20:00						Refreshments, Exhibition, and Poster Session C	
20:15						Refreshments, Exhibition, and Poster Session C	
20:30						Refreshments, Exhibition, and Poster Session C	
20:45						Refreshments, Exhibition, and Poster Session C	
21:00						Refreshments, Exhibition, and Poster Session C	
21:15						Refreshments, Exhibition, and Poster Session C	
19:00	Welcome Reception at exhibition						
19:15	Welcome Reception at exhibition						
19:30	Welcome Reception at exhibition						
19:45	Welcome Reception at exhibition						
20:00	Welcome Reception at exhibition						
20:15	Welcome Reception at exhibition						
20:30	Welcome Reception at exhibition						
20:45	Welcome Reception at exhibition						
21:00	Welcome Reception at exhibition						
21:15	Welcome Reception at exhibition						
19:00	Dinner at Schloss Mainz						
19:15	Dinner at Schloss Mainz						
19:30	Dinner at Schloss Mainz						
19:45	Dinner at Schloss Mainz						
20:00	Dinner at Schloss Mainz						
20:15	Dinner at Schloss Mainz						
20:30	Dinner at Schloss Mainz						
20:45	Dinner at Schloss Mainz						
21:00	Dinner at Schloss Mainz						
21:15	Dinner at Schloss Mainz						

SP1 Biomagnetism and medical applications

SP2 Electronic correlations, superconductivity, superconducting spintronics

SP3 Frustrated and disordered magnetism (including spin ice)

SP4 Magnetic memories and magnetic recording, sensors

SP5 Magnetic thin films, surface, interfaces, and nano-structured low dimensional systems

SP6 Magnetic shape memory, magnetoelastic and multifunctional materials

SP7 Magnetism and spintronics in molecular materials and carbon based systems

SP8 Antiferromagnets and antiferromagnetic spintronics

SP9 Spin transport and spin dynamics

SP10 Magnetic materials for energy applications

SP11 Micromagnetic modelling

SP12 Ultrafast laser-induced magnetization dynamics, magneto-optics and magnetoplasmonics

SP13 Complex oxides, multiferroics and composite multiferroics

SP14 Domain walls, vortices and skyrmions (including Spin-orbit related effects)

SP15 Spin waves and magnonics

SP16 Spins for quantum technologies

SP17 Spin caloritronics

SP18 Magnetism and spin transport in topological materials (Topological insulators and Weyl semimetals)

# 9<sup>th</sup> JEMS Conference 2018 | Rheingoldhalle Mainz

Monday, 3<sup>rd</sup> September 2018



lecture hall	GUTENBERG-SAAL A (260 THEATRE)		GUTENBERG-SAAL B (260 THEATRE)		GUTENBERG-SAAL C (260 THEATRE)		GUTENBERG-SAAL D (260 THEATRE)		KONGRESS-SAAL (650 THEATRE)		lecture hall	
TIME												TIME
07:00	<b>Registration</b> coffee / tea will be served											07:00
07:15												07:15
07:30												07:30
07:45												07:45
08:00												08:00
08:15										Welcome Address		08:15
08:30										<b>Plenary Talk:</b> TBA Claus Ropers		08:30
09:15	time for participants to change rooms											09:15
09:20					<b>Semiplenary Talk:</b> TBA Gerrit Bauer				<b>Semiplenary Talk:</b> TBA Russell Cowburn			09:20
10:00	<b>morning coffee break</b>											10:00
	<b>SP5 - PARALLEL SESSION 1</b>		<b>SP12 - PARALLEL SESSION 1</b>		<b>SP14 - PARALLEL SESSION 1</b>		<b>SP10 - PARALLEL SESSION 1</b>		<b>SP13 - PARALLEL SESSION 1</b>			
10:15	<b>TBA</b> Roland Wiesendanger		A-1169	The early stages of ultrafast demagnetization Yves Acremann	<b>TBA</b> Anne Bernard-Mantel		A-1369	Fe5PB2 and its alloys with Co and 5d elements as candidates for rare-earth free permanent magnets Miroslaw Werwinski	<b>TBA</b> Morgan Trassin			10:15
10:30			A-1239	Simulation of Ultrafast Electron Spin Dynamics in Ferromagnetic Heterostructures Dennis Nenno			A-2376	Possible highest performance of permanent magnet materials Hisazumi nAkai				10:30
10:45	A-1202	Tuning spin spirals via surface reconstruction in 2Fe / Ir(111) Melanie Dupé	<b>TBA</b> Peter Oppeneer		A-1123	Electric field modulation of magnetic domain wall velocity in Pt / Co / Pd structure Tomohiro Koyama	<b>TBA</b> Lise-Marie Lacroix		A-1852	The Coulomb based magneto-electric coupling in multi-ferroic tunnel junctions and granular multiferroics Oleg Udalov	10:45	
11:00	A-1730	Tuning Exchange and Dzyaloshinskii-Moriya interactions of ultrathin Co films on Ir (111) Sebastian Meyer			A-1141	Unidirectional magnon-induced domain wall motion in the presence of interfacial Dzyaloshinskii-Moriya interaction Kyoung-Whan Kim			A-1598	Mechanism for reversible switching of spin polarization in Co / PZT / LSMO tunnel junction by electric field Natasa Stojic	11:00	
11:15	A-1735	Asymmetric and symmetric exchange in a generalized 2D Rashba ferromagnet Mikhail Titov	A-1254	Comparison of induced and permanent magnetic moment in the ultrafast demagnetization and remagnetization dynamics of ferromagnetic alloys Simon Häuser	A-1164	Probing the ultimate size limit of artificial magnetic domains in exchange-biased thin films Alexander Gaul	A-1944	Influence of Sn substitution on the magnetic and magnetocaloric properties of Ni <sub>2</sub> Mn(In, Sn) alloys Massimo Solzi	A-1570	Low noise all-oxide magnetic tunnel junctions based on a La <sub>0.75</sub> Sr <sub>0.3</sub> MnO <sub>3</sub> / Nb:SrTiO <sub>3</sub> interface Myriam Pannetier Lecoeur	11:15	
11:30	A-1826	Artificial all-amorphous magnetic superstructures Giuseppe Muscas	A-1313	Single-pulse all-optical switching in synthetic ferrimagnetic racetracks Mark Laliou	A-1187	Isolated skyrmions with vanishing anisotropy in Co / Ru (0001) Marie Böttcher	A-1995	Multi-Site Exchange Enhanced Barocaloric Response in Mn <sub>3</sub> NiN David Boldrin	A-1956	Study on magnetic characteristics modulated by Ferromagnetic / Ferroelectric heterojunction Akinobu Yamaguchi	11:30	
11:45	A-1926	Magnetic ground states of perfect Py nanotubes and rings Elisabeth Josten	A-1366	Laser-induced spin transfer torques in magnetic domain walls Pavel Baláz	A-1204	In situ Lorentz TEM of Magnetic Domains in FeRh Thin Film M. Saleh Gorji	A-2100	Structure, magnetism of MnxFe <sub>2-x</sub> P <sub>0.65</sub> O <sub>0.4</sub> compounds Xinmin You	A-2284	Magnetolectric coupling in a layered-perovskite thin film heterostructure Chuanshou Wang	11:45	
12:00	A-2198	Anatomy of magnetic proximity effects in platinum inferred by magnetotransport measurements Can Onur Avci	A-1423	Speed and efficiency of femtosecond spin current injection into a nonmagnetic material David Schummer	A-1238	Ultrafast toggle switching of magnetic skyrmions J. H. Mentink	A-1949	Tuning direct and inverse magnetocaloric effect in Ni-Mn-In Heuslers for room temperature magnetic refrigeration Franca Albertini	A-1698	Strain-induced magnetization control in a LSMO / BTO heterostructure Federico Motti	12:00	

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Monday, 3<sup>rd</sup> September 2018



12:15											12:15
12:30											12:30
12:45											12:45
13:00											13:00
13:15											13:15
13:30	<b>lunch break / Exhibition</b>										13:30
13:45	<b>SP5 - PARALLEL SESSION 2</b>		<b>SP8 - PARALLEL SESSION 2</b>		<b>SP9 - PARALLEL SESSION 1</b>		<b>SP10 - PARALLEL SESSION 2</b>		<b>SP13 - PARALLEL SESSION 2</b>		13:45
	A-2317	<b>Magnetism of 4f-atoms adsorbed on metal and Graphene substrates</b> Alexander Shick	<b>TBA</b> Michel Viret		A-2249	<b>Characteristic switching temperature in spin-orbit torque switching in metallic / ferrimagnetic system</b> Thai Ha Pham	<b>TBA</b> Tetsuya Nakamura		A-2416	<b>Magneto-ionic control of magnetism using a solid state proton pump</b> Aik Jun Tan	
	A-1085	<b>FePt-Tb alloy thin films designed for all-optical switching</b> Natalia Safonova			A-1078	<b>Spin torque induced oscillations in fully perpendicular magnetic tunnel junction</b> Vadym Lurchuk			A-1558	<b>Soliton excitations observed in multiferroic LiCuVO 4</b> Christoph Grams	
14:00	A-1148	<b>Perpendicular anisotropy, unconventional spin texture and extraordinary gradual spin reorientation transition of cobalt films in contact with graphene</b> Johann Coraux	A-2365	<b>Real-space imaging of non-collinear antiferromagnetic order with a single spin magnetometer</b> Mohammad Waseem Akhtar	<b>TBA</b> Sug-Bong Choe		A-1344	<b>Atomic scale microstructure and local composition of recycled high performance Nd 2 Fe 14 B permanent magnets for energy applications</b> Urban Rohrmann	A-2366	<b>Magnetic order, hysteresis, and phase coexistence in magnetoelectric LiCoPO 4</b> Ellen Fogh	14:00
14:15	A-1152	<b>Interface coupling between 3d-La 0.67 Sr 0.33 MnO 3 and 5d-SrIrO 3</b> Lukas Bergmann	A-2132	<b>Nanoscale imaging of antiferromagnetic order using single-spin magnetometry</b> Brendan Shields			A-2177	<b>Tailored Metal Injection Moulding Of Isotropic NdFeB Hard Magnets Based On Recycled Powders With And Without Nd-Additions</b> Benjamin Podmiljsak	A-2362	<b>Field-induced reentrant magnetoelectric phases in LiNiPO 4</b> Niels Bech Christensen	14:15
14:30	A-1237	<b>Tuning the magnetic anisotropy in exchange coupled bimagnetic core / shell nanoparticles</b> Elin Winkler	A-1329	<b>Magnonic Transport In Single Crystal Antiferromagnetic Insulators over 40 μm</b> Romain Lebrun	A-1189	<b>Spin pumping as a generic probe for linear spin fluctuations, irrespective of the magnetic and electrical nature of the spin-sink</b> Olga Gladii	A-1780	<b>From binary Mn-Ga to ternary Mn-Al-Ga: the formation, stability and magnetic properties of the L1 0 structure</b> Torsten Mix	A-1753	<b>Magnetoelectric Polarizability in Magnetic Insulators</b> Maximilian Merte	14:30
14:45	A-1256	<b>Pt / Co / W as a Candidate for Low Power Nanomagnetic Logic</b> Simon Mendisch	A-2059	<b>Néel Spin Orbit Torque driven antiferromagnetic resonance in Mn2Au probed by time-domain THz spectroscopy</b> Nilabha Bhattacharjee	A-1395	<b>Magnon auto-oscillation under zero magnetic field</b> Nana Nishida	A-1336	<b>Development of permanent magnet properties in gas-atomized MnAl particles</b> Javier Rial	A-2361	<b>A new high-temperature ordered magnetic phase in e-Fe2O3</b> Marti Gich	14:45
15:00	A-1424	<b>Ferromagnetic resonance in core-shell nanoparticles with multi-type exchange anisotropy</b> Igor Poperechny	A-1535	<b>Role of thermal activation in the electrical switching of antiferromagnetic Mn 2 Au and CuMnAs</b> Markus Meinert	A-1517	<b>Phase locked loop operation of spin torque oscillators using custom integrated circuits</b> Pankaj Sethi	A-1255	<b>Multicaloric effects in Magnetic Shape Memory Alloys</b> Lluís Manosa	A-1291	<b>Nature of exchange-bias effect in ferrimagnetic orthoferrites</b> Andrzej Wisniewski	15:00
15:15	A-1895	<b>Field Dependence of the Ferromagnetic / Superconducting Proximity Effect in a YBCO/STO/LCMO Multilayer</b> Frank Klose	A-1595	<b>Spin-dependent transport and dynamics of antiferromagnetic skyrmions</b> Collins Akosa	A-1613	<b>Ultrafast spin-dependent THz dynamics and high harmonic generation in semiconductor nanostructures</b> Dominik Schulze	A-1917	<b>Degrading effect of cold working on the magnetocaloric performance of a Ni50Mn34In16 Heusler alloy</b> Francesco Cugini	A-2045	<b>Epitaxial growth of vanadates by ozone assisted Molecular Beam Epitaxy</b> Gauthier Masset	15:15
15:30	<b>afternoon coffee break</b>										15:30
15:45											15:45
16:00	<b>SP5 - PARALLEL SESSION 3</b>		<b>SP12 - PARALLEL SESSION 2</b>		<b>SP14 - PARALLEL SESSION 2</b>		<b>SP10 - PARALLEL SESSION 3</b>		<b>SP13 - PARALLEL SESSION 3</b>		16:00
	A-2055	<b>Modification of Spin-Orbit Torques by Interfacial Oxygen</b> Jayshankar Nath	<b>TBA</b> Tobias Kampfrath		A-1263	<b>First-principles study of skyrmion formation at 3d/4d transition-metal interfaces</b> Soumyajyoti Haldar	A-2256	<b>Rapidly quenched ultra-thin soft magnetic amorphous ribbons for high-frequency power applications</b> Ansar Masood	A-1812	<b>Coupled spin dimers driven by charge and orbital ordering in an open-shell p-electron Rb 4 O 6 compound</b> Denis Arcon	
16:15	A-2159	<b>Tailoring the in-plane magnetic anisotropy at the Fe (110) surface</b> Michał Ślęzak			A-1264	<b>Effect of extended defects over the skyrmionic dynamics. Analytical and numerical treatment</b> Carles Navau	A-2265	<b>Permeability of Nd 2 Fe 17 N x -resin composites at micro-wave frequency range</b> Nobuyoshi Imaoka	A-1858	<b>Magnetic hyperfine interactions at La and Mn sites in LaMnO 3</b> Artur Wilson Carbonari	16:15

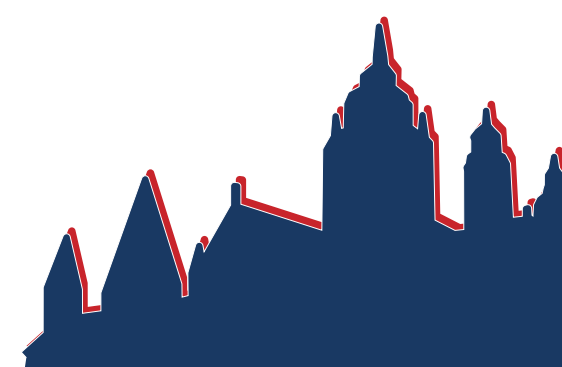
# 9<sup>th</sup> JEMS Conference 2018 | Rheingoldhalle Mainz

Monday, 3<sup>rd</sup> September 2018



16:30	A-1319	<b>Graphene-based synthetic antiferromagnets and ferrimagnets with perpendicular magnetic anisotropy</b> Pierluigi Gargiani	A-1428	<b>Ultrafast Dynamics of Spin and Orbital Moments upon Demagnetization in GdFeCo alloys</b> Martin Hennecke	A-1266	<b>Domain formation in magnonic vortex crystals</b> Janne Lütjens	A-1221	<b>Characterization of magnetic properties of grain-oriented electrical steel after elasto-plastic loading using magneto-optical Kerr microscopy and micromagnetic multiparameter, microstructure and stress analysis (3MA) system</b> Shayan Deldar	A-2148	<b>Large positive and negative magnetodielectric coupling in Fe half-doped LaMnO<sub>3</sub></b> Jasnamol Pezhumkattil Palakkal	16:30
16:45	A-1502	<b>TbCoFe / [Co / Ni / Pt] Exchange-Coupled Heterostructures</b> Michael Heigl	A-1447	<b>Terahertz induced demagnetization in CoPt film: towards ultrafast ballistic switching</b> Debanjan Polley	A-1281	<b>Complex Magnetic Bubbles in Patterned NdCo<sub>5</sub> Films with Weak Perpendicular Magnetic Anisotropy</b> Aurelio Hierro Rodriguez	A-1749	<b>Magnetic losses reduction in non-oriented electrical steels via strain-induced grain boundary migration effects.</b> Ivan Petryshynets	A-1342	<b>Magnetic Fluctuations and the Origin of Antiferromagnetism in RENiO<sub>3</sub> Perovskites</b> Lukas Korosec	16:45
17:00	A-1513	<b>High-resolution Kerr microscopy investigations on polygonal nanowires for reliable domain wall position prediction</b> Enno Lage	A-1449	<b>Optical control of competing exchange interactions and coherent spin-charge coupling in two-orbital Mott insulators</b> Marion M S Barbeau	A-1289	<b>Current driven domain wall motion in individual cylindrical magnetic nanowires</b> Michael Schöbitz	A-1212	<b>Siliconisation of grain oriented electrical steel through the method of diffusion annealing</b> Sreedhara Sarma	A-1429	<b>Probing domain dynamics in complex oxide micromagnets using scanning transmission x-ray microscopy</b> Einar Digernes	17:00
17:15	A-1560	<b>Artificial tubular exchange bias domain patterns for paternoster-like transport of magnetic particles</b> Henning Huckfeldt	A-1486	<b>Exchange spin dynamics in two sublattice spin structures, stimulated by a femtosecond optical pump</b> Natalia Orlova	A-1346	<b>Electric control of magnetic vortex core gyration dynamics</b> Mariia Filianina	A-1796	<b>Relationship between microstructure and properties of soft magnetic materials for electric motor applications</b> Dagmar Goll	A-2123	<b>Exploring the magnetic properties of BiFeO<sub>3</sub>-PbTiO<sub>3</sub> based ceramics</b> Ashwini Kumar	17:15
17:30	A-2135	<b>Influence of segment length on domain wall pinning in multisegmented Co / Ni nanowires for next generation data storage</b> Hanan Mohammed	A-1621	<b>Ultrafast relaxation dynamics in a Kitaev spin-liquid candidate #CHR:alpha_LOWER #-RuCl<sub>3</sub></b> Steinn Ymir Agustsson	A-1420	<b>Trochoidal motion and pair generation in skyrmion and antiskyrmion dynamics driven by spin-orbit torques</b> Ulrike Ritzmann	A-2264	<b>Magnetocaloric effect and magnetoelectric coupling in Fe-Rh films</b> Abdulkarim Amirov	A-2272	<b>Magnetoelectric properties of rare-earth langasite Ho<sub>0.09</sub>La<sub>2.91</sub>Ga<sub>5</sub>SiO<sub>14</sub></b> Nadezhda Kostyuchenko	17:30
17:45	A-2241	<b>Layer-resolved magnetic imaging of domains in multilayered mesoscale tubes and their response to magnetic field</b> Michal Stano	A-1627	<b>All optical switching and ultrafast magnetization dynamics in doped FePt thin films</b> Martin Stiehl	A-1432	<b>Experimental observation of chiral magnetic bobbars in nanostructured FeGe</b> Nikolai S. Kiselev	A-1792	<b>Broadband spintronics diodes for energy harvesting</b> Mario Carpentieri	A-1240	<b>Ferroelectric ferrimagnetic LiFe<sub>2</sub>F<sub>6</sub>: charge ordering mediated magnetoelectricity</b> Shuai Dong	17:45
18:00											18:00
18:15											18:15
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19:00											19:00
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20:00											20:00

Welcome Reception at exhibition



# 9<sup>th</sup> JEMS Conference 2018 | Rheingoldhalle Mainz

Tuesday, 4<sup>th</sup> September 2018



lecture hall	GUTENBERG-SAAL A (260 THEATRE)	GUTENBERG-SAAL B (260 THEATRE)	GUTENBERG-SAAL C (260 THEATRE)	GUTENBERG-SAAL D (260 THEATRE)	KONGRESS-SAAL (650 THEATRE)	lecture hall	
TIME						TIME	
07:00	<b>Registration</b> coffee/tea will be served					07:00	
07:15						07:15	
07:30						07:30	
07:45						07:45	
08:00						08:00	
08:15						08:15	
08:30						Plenary Talk: TBA Tomas Jungwirth	08:30
09:15	time for participants to change rooms					09:15	
09:20				Semiplenary Talk: TBA Luis Hueso	Semiplenary Talk: TBA Stefan Blügel	09:20	
10:00	<b>morning coffee break</b>					10:00	
	<b>SP1 - PARALLEL SESSION 1</b>	<b>SP12 - PARALLEL SESSION 1</b>	<b>SP15 - PARALLEL SESSION 1</b>	<b>SP3 - PARALLEL SESSION 1</b>	<b>SP13 - PARALLEL SESSION 1</b>		
10:15	TBA Ana Espinosa	A-1685 Relativistic spin dynamics applied to ultrafast magnetic phenomena Ritwik Mondal	TBA Gisela Schütz	A-1849 Artificial Spin Ice Inspired Computation using Nano-magnets Hanu Arava	TBA Kathrin Dörr	10:15	
10:30		A-1841 The ultrafast AFM to FM phase transition of FeRh probed by magnetic X-ray resonant scattering Robert Carley		A-1512 Emergent dynamic chirality in a thermally driven artificial spin ratchet Sebastian Gliga		10:30	
10:45	A-1208 Magnetic nanoparticle characterization using thermal noise magnetometry Jonathan Leliaert	TBA Martin Aeschliemann	A-2118 Imaging of large amplitude strain spin waves Ferran Macià	TBA Carolin Behncke	A-1831 Analysis of magneto-elastic coupling mechanisms in FePt / BaTiO <sub>3</sub> bilayers through structural and magnetic characterization Augusto Román	10:45	
11:00	A-1267 A trisymmetric magnetic microchip surface for unrestricted two-way directional movement of magnetic microbeads Jeffrey McCord		A-2186 Magnonic band structure in thin FeN magnetic films with stripe domains Silvia Tacchi		A-1335 Study of the magnetic order in epitaxially strained thin films of multiferroic perovskite Sr <sub>1-x</sub> BaxMnO <sub>3</sub> by using low energy muon spin spectroscopy Pedro A. Algarabel	11:00	
11:15	A-1290 Detection of Micron to Submicron Biologic Objects with Giant Magneto-Resistive Sensors Manon Giraud	A-1846 Spin currents generated during ultrafast demagnetization Karel Carva	A-2211 Programmable control of spin-wave transmission in a domain-wall spin valve Sebastiaan van Dijken	A-1140 Balanced nanomagnetic logic gate in Kagome spin ice Pieter Gypens	A-1564 Enhanced interface magnetism by structural reconstruction in La <sub>0.7</sub> Sr <sub>0.3</sub> MnO <sub>3</sub> /SrTiO <sub>3</sub> heterostructures M. Carmen Muñoz	11:15	
11:30	A-1400 Functionalized Iron Nanowires for Chemical and Photothermal Cancer Cell Death Induction Aldo Martínez-Banderas	A-1871 Magnetic and Structural Dynamics in Antiferromagnetically Coupled Fe / Cr Superlattices Daniel Schick	A-2350 Micromagnetic simulations of non-reciprocal Hawking radiation from magnonic black hole Mykola Dvornik	A-2173 Lieb-Mattis theorem and spin frustration in molecular nanomagnets Grzegorz Kamieniarz	A-1555 Pulsed Laser deposition of oxide thin films on buffered Si(100) substrates Laura Steren	11:30	
11:45	A-1542 Parametric analysis of magnetic nanostructures for hyperthermia applications Riccardo Ferrero	A-1878 Spin - charge interconversion at nonmagnetic metal/oxide interface mediated by light and spin orbit interaction Jorge Puebla	A-1616 Local spin-wave dispersion and damping in thin yttrium-iron-garnet films Rouven Dreyer	A-2333 High Spin Cycles: Topping the Spin Record for a Single Molecule verging on Quantum Criticality Jürgen Schnack	A-1648 Electrically modulated magnetoelectric composites for sensing small magnetic fields Patrick Hayes	11:45	

# 9<sup>th</sup> JEMS Conference 2018 | Rheingoldhalle Mainz

Tuesday, 4<sup>th</sup> September 2018



12:00	A-1584	<b>Size optimization of magnetite-gold hybrids for theranostics</b> Mariia Efremova	A-1893	<b>Exchange and Elliott-Yafet scattering in a ferromagnetic multi-sublattice model</b> Hans Christian Schneider	A-2359	<b>Nonreciprocal spin wave focusing in ultrathin films and multilayers with the Dzyaloshinskii-Moriya interaction</b> Joo-Von Kim	A-1816	<b>Exchange-anisotropy and frustration in epitaxial thin films of SrMn 0.5 Ir 0.5 O3</b> Supratik Dasgupta	A-1356	<b>Correlation of Oxygen Vacancies and Magnetism in La 0.7 Sr 0.3 MnO 3 Thin Films in Vertical Memristive Devices</b> Marek Wilhelm	12:00
12:15	<b>lunch break exhibition / poster session</b>										12:15
12:30											12:30
12:45											12:45
13:00											13:00
13:15											13:15
13:30	<b>SP5 - PARALLEL SESSION 4</b>		<b>SP6 - PARALLEL SESSION 1</b>		<b>SP14 - PARALLEL SESSION 3</b>		<b>SP17 - PARALLEL SESSION 1</b>		<b>SP9 - PARALLEL SESSION 2</b>		13:30
13:45	A-2338	<b>Domain structures in Fe 100-x Ga x / MgO(001) films</b> Miguel Ciria	<b>TBA</b> Volodymyr Chernenko		A-1444	<b>Theory of isolated magnetic skyrmions: From fundamentals to room temperature applications</b> Felix Buettner	A-1174	<b>Longitudinal spin Seebeck effect in a magnetic insulator induced by ballistic transport of quasi-acoustic thermal magnons</b> Vitaliy Vasyuchka	<b>TBA</b> Toner van der Sar		13:45
	A-1622	<b>Spin Diffusion-Enhanced Non-Adiabatic Spin Torque in Rare-Earth-Doped Permalloy determined by Direct SEMP/PA Imaging</b> Daniel Schöнке			A-1454	<b>Damped localized excitations in k #CHR:pi_LOWER#-skyrmions</b> Levente Rózsa	A-1795	<b>Thermodynamic reciprocity of the spin Seebeck and spin Peltier effects</b> Vittorio Basso			
14:00	A-1663	<b>Magnetoelastic and Damping Properties of Co 2 Fe x Mn 1-x Si Heusler Alloys Thin Films</b> Oleksandr Chumak	A-1037	<b>Flexible strain direction sensing devices based on magneto-resistive and magnetoelastic effects</b> Shinya Ota	A-1458	<b>Antiskyrmions in Ferromagnets and Antiferromagnets</b> Oleg A Tretiakov	<b>TBA</b> Ken-ichi Uchida		A-1937	<b>Spin-orbit torques and magnetization switching in epitaxial Pd/Co 2 FeAl/MgO heterostructures</b> Mihai Sebastian Gabor	14:00
14:15	A-2001	<b>Relationship between spacer material and thickness on the damping and anisotropy of CoFeB in perpendicular double MgO free layer for MRAM</b> Sebastien Couet	A-1470	<b>Innovative technique for thin films magnetostriction measurements by scanning probe microscopy</b> Marco Coisson	A-1504	<b>Quantitative magnetic imaging of skyrmions and related spin structures using off-axis electron holography</b> András Kovács			A-1970	<b>Resonant expulsion of a magnetic vortex core excited by RF torques: towards real time threshold RF detectors</b> Samh Menshaway	14:15
14:30	A-1162	<b>Mechanisms of electric field effect on magnetism in Pt/Co with solid-state gating under different fabrication condition</b> Takamasa Hirai	A-1948	<b>Influence of atomic disorder on the ground state of Ni-Co-Mn-Sn alloys with regular and inverse Heusler structures</b> Vladimir Sokolovskiy	A-1534	<b>Thermal stability of metastable magnetic skyrmions: Entropic narrowing and significance of internal eigenmodes</b> Louise Desplat	A-1524	<b>Role of the Magnon Dispersion in the Spin Seebeck Effect in Fe 3 O 4 Thin Films</b> Guru Venkat	A-1038	<b>Imaging spin diffusion in germanium at room temperature</b> Federico Bottegoni	14:30
14:45	A-1379	<b>Large Room Temperature Voltage Control of Magnetic Anisotropy in SrTiO 3 \ Co \ Pt</b> Bart Vermeulen	A-1940	<b>On the symmetry of the martensitic transformation in Ni 2 MnGa</b> Fabio Orlandi	A-1552	<b>Probabilistic computing devices based on room temperature skyrmion diffusion</b> Jakub Zázvorka	A-2083	<b>Spin Seebeck effect and phonon energy transfer in heterostructures containing layers of a normal metal and a ferromagnetic insulator</b> Valerij Shklovskij	A-1112	<b>Spin-orbitronics in graphene/Transition Metal Dichalcogenide heterostructures</b> Jose H. Garcia	14:45
15:00	A-1746	<b>Voltage-induced magneto ionic switching of anisotropy and magnetic domains in FeOx / Fe nanostructures</b> Jonas Zehner	A-2093	<b>Prediction of new quaternary Heusler compounds with half-metallic ferromagnetism and large Curie temperatures</b> Biplab Sanyal	A-1556	<b>Reservoir computing based on magnetic textures</b> Daniele Pinna	A-1605	<b>Temperature dependence of the non-local spin Seebeck effect in YIG/Pt nanostructures</b> Tobias Wimmer	A-1122	<b>Unveiling the mechanisms of the spin Hall effect in Ta</b> Eduarne Sagasta	15:00
15:15	A-1061	<b>Magnetic reorientation in anisotropic Heisenberg ferromagnets</b> Joren Vanherck	A-1461	<b>Origin of the enhanced magnetostriction of Galfenol at high Ga contents</b> Silvia Gallego	A-1601	<b>Fluctuating skyrmion ensembles on finite Pd / Fe / Ir (111) nanoislands</b> Alexander F. Schäffer	A-1082	<b>Observation of an interface-induced anomalous Nernst effect in Fe 3 O 4 / Pt-based heterostructures</b> Rafael Ramos	A-1198	<b>Observation of the conversion between charge and spin in a Rashba channel</b> Hyun Cheol Koo	15:15



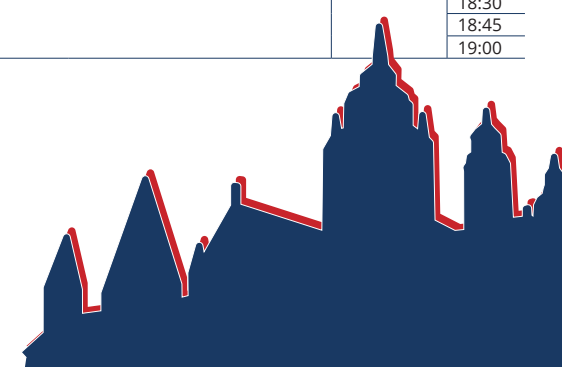
# 9<sup>th</sup> JEMS Conference 2018 | Rheingoldhalle Mainz

Tuesday, 4<sup>th</sup> September 2018



15:30		afternoon coffee break							15:30		
15:45									15:45		
16:00		SP5 - PARALLEL SESSION 5	SP12 - PARALLEL SESSION 1		SP15 - PARALLEL SESSION 2		SP3 - PARALLEL SESSION 2		SP9 - PARALLEL SESSION 3		
16:00	A-1054	<b>Direct Measurement of the Intrinsic Sharpness of Magnetic Interfaces Formed by Ion Beams</b> Grace Causer	A-1959	<b>Spectral and polarization selective ultrafast photo-magnetic switching in iron garnet</b> Krzysztof Szerenos	A-1633	<b>Exchange-torque-induced excitation of perpendicular standing spin waves in nanometer-thick yttrium iron garnet films</b> Huajun Qin	A-1920	<b>Elementary excitations and stability of the spin-stripe state in a quantum spin chain</b> Matej Pregelj	A-1217	<b>Spin-Orbit Torques At Disordered Interfaces</b> Diana Prychynenko	16:00
16:15	A-1080	<b>Disorder-induced ferromagnetism in Fe 60 Al 40 films on a local scale</b> Alevtina Smekhova	A-2076	<b>Reversing the exchange bias using all-optical helicity-dependent magnetic switching</b> Pierre Vallobra	A-1651	<b>An integrated magnonic half-adder</b> Thomas Brächer	A-1884	<b>Observation of a 4-spin Plaquette Singlet State in the Shastry-Sutherland compound SrCu<sub>2</sub>(BO<sub>3</sub>)<sub>2</sub></b> Henrik M. Ronnow	A-1286	<b>Unidirectional magnetoresistance in a single ferromagnetic layer at room temperature</b> Chiara Ciccarelli	16:15
16:30	A-1740	<b>Modification of the magnetization ordering in Pt/Co/Pt trilayers depending on the scanning direction of the focused ion beam</b> Piotr Mazalski	A-2126	<b>Unraveling the phonon magnon coupling, theory and first principles simulations Ab initio microscopic theory of phonon-magnon interactions</b> Pablo Maldonado	A-1674	<b>Local spin-wave modes in 2D array of dipolarly coupled magnetic nanodots with a "defect" dot</b> Roman Verba	A-1146	<b>Artificial spin systems as experimental simulators of frustrated magnets: from the fragmentation of magnetization to the six vertex model</b> Nicolas Rougemaille	A-1331	<b>Large unidirectional spin Hall magnetoresistance induced by highly spin-polarised Heusler compounds</b> Christian Lidig	16:30
16:45	A-2179	<b>Magnetic anisotropy of nano-structured ferrite oxides</b> Krzysztof Pitala	A-2174	<b>Influence of interface alloying on ultrafast spin dynamics in Co/Pt heterostructures</b> Clemens von Korff Schmising	A-1700	<b>Angular Dependent Magnetization Dynamics of Quasicrystalline Nanomagnet Lattices</b> Vinayak Bhat	A-1537	<b>Degeneracy and thermodynamics of planar artificial spin ice</b> Clodoaldo Irineu Levartoski de Araujo	A-1347	<b>Dispersion relation of the interlayer exchange coupled tailored ferrimagnets</b> Serhii Sorokin	16:45
17:00	A-1664	<b>Ultrafast single laser pulse demagnetization via domain formation</b> Jan Kisielewski	A-2234	<b>Ultrafast magnetization dynamics and switching in ferrimagnets with and without compensation temperature</b> Marharyta Davydova	A-1708	<b>How to generate whispering gallery magnons</b> Katrin Schultheiss	A-1699	<b>A classification of frustration from topology</b> Krishanu Roychowdhury	A-1385	<b>Optimization of the spin-to-charge conversion signal in CoFe / Pt local spin injection devices</b> Inge Groen	17:00
17:15	A-2099	<b>Time resolved MOKE measurements with calibrated lattice Temperature</b> Lisa Willig	A-2253	<b>Electron dynamics driving ultrafast demagnetization in itinerant ferromagnets and alloys</b> Baerbel Reithfeld	A-1925	<b>Magnonic properties of dipolar coupled assemblies of few nanoparticles</b> Benjamin Zingsem	A-1167	<b>Collective magnetism in an artificial 2D XY spin system</b> Naëmi Leo	A-1393	<b>Spin transport through interfaces: how temperature matters</b> Kriti Gupta	17:15
17:30	A-1116	<b>Magnetic Proximity Effect and Exchange Coupling in Pt/Cr Bilayers</b> Marco Asa	A-2255	<b>On-chip generation of unipolar THz current pulses by the inverse spin Hall effect</b> Georg Woltersdorf	A-1990	<b>Spin-wave generation by radio-frequency spin-orbit torque antenna: torques and efficiencies</b> Giacomo Talmelli	A-1219	<b>Interaction radius influence on phase transition in artificial kagome spin ice</b> Petr Andriushchenko	A-1407	<b>Spin pumping in ferrimagnets: Bridging ferro- and antiferromagnets</b> Akashdeep Kamra	17:30
17:45	A-1426	<b>Direct printing of metallic 3D magnetic nanostructures by focused electron beam induced deposition</b> Michael Huth	A-2342	<b>Ultrafast spin dynamics in transition metal dichalcogenides probed by terahertz spectroscopy</b> Lukas Nadvornik	A-2044	<b>Nonlinear spin conductance of yttrium iron garnet thin films driven by large spin-orbit torque</b> Nicolas Thiery	A-1675	<b>Signatures of the field-induced spin-nematic state in the frustrated anisotropic spin-chain compound LiCuSbO<sub>4</sub></b> Vladislav Kataev	A-1500	<b>Strongly anisotropic spin relaxation in graphene-transition metal dichalcogenide heterostructures at room temperature</b> Luis Antonio Benítez	17:45
18:00	<b>Refreshments, Exhibition, and Poster Session C</b>										18:00
18:15											18:15
18:30											18:30
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19:00											19:00

Refreshments, Exhibition, and Poster Session C



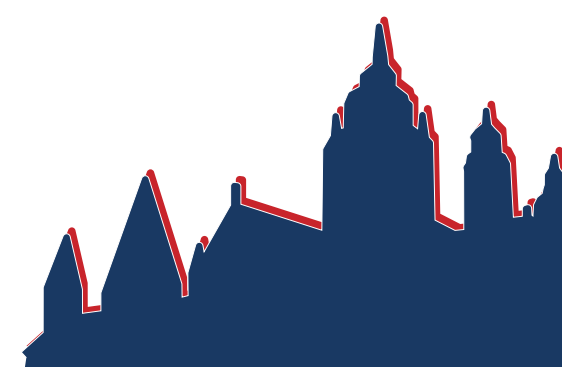


# 9<sup>th</sup> JEMS Conference 2018 | Rheingoldhalle Mainz

Wednesday, 5<sup>th</sup> September 2018



12:15	<b>lunch break exhibition / poster session</b>		12:15
12:30			12:30
12:45			12:45
13:00			13:00
13:15			13:15
13:30			Frontiers in Magnetism Talk: Pietro Gambardella
13:45			13:45
14:00		Peter Grunberg Honorary Session	14:00
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14:45			14:45
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16:00		16:00	
16:15	<b>Exhibition, and Poster Session B</b>		16:15
16:30			16:30
16:45			16:45
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18:45	<b>congress dinner at Schloss Mainz</b>		18:45
19:00			19:00
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21:00	21:00		
21:15	21:15		



# 9<sup>th</sup> JEMS Conference 2018 | Rheingoldhalle Mainz

Thursday, 6<sup>th</sup> September 2018



lecture hall	GUTENBERG-SAAL A (260 THEATRE)	GUTENBERG-SAAL B (260 THEATRE)	GUTENBERG-SAAL C (260 THEATRE)	GUTENBERG-SAAL D (260 THEATRE)	KONGRESS-SAAL (650 THEATRE)	lecture hall	
TIME						TIME	
07:00	<b>Registration</b> coffee/tea will be served					07:00	
07:15						07:15	
07:30						07:30	
07:45						07:45	
08:00						08:00	
08:15						08:15	
08:30						Plenary Talk: <b>TBA</b> Julie Grollier	08:30
09:15	time for participants to change rooms					09:15	
09:20				Semiplenary Talk: <b>TBA</b> Jean-Marc Triscone	Semiplenary Talk: <b>TBA</b> Daniel Loss	09:20	
10:00	<b>morning coffee break</b>					10:00	
	<b>SP18 - PARALLEL SESSION 1</b>	<b>SP3 - PARALLEL SESSION 2</b>	<b>SP15 - PARALLEL SESSION 3</b>	<b>SP16 - PARALLEL SESSION 1</b>	<b>SP11 - PARALLEL SESSION 1</b>		
10:15	<b>TBA</b> Eli Zeldov	A-2030 <b>Imaging the magnetic stray field of an artificial chiral spin ice system</b> Marcus Wyss	<b>TBA</b> Burkard Hillebrands	A-1059 <b>Endohedral Fullerenes as Molecular Qubits</b> ShangDa Jiang	<b>TBA</b> Mikail Poluektov	10:15	
10:30		A-1727 <b>Interaction Induced Special Temperatures in Frustrated Magnets and Gases</b> Patrik Henelius		A-1250 <b>A Two-Qubit Molecular Architecture for Electron-mediated Quantum Simulation</b> Matteo Atzori		10:30	
10:45	A-1460 <b>Electronic properties in chiral spin textures from non-commutative quantum mechanics</b> Fabian Rudolf Lux	<b>TBA</b> Benjamin Jungfleisch	A-1376 <b>Bose-Einstein Condensation of Magnons by an Instantaneous Cooling</b> Andrii Chumak	<b>TBA</b> Wolfgang Wernsdorfer	A-1463 <b>Analogue simulation of three dimensional magnetic self assembly processes</b> Leon Abelmann	10:45	
11:00	A-1687 <b>Chemical, structural and magnetic properties of the Fe / Sb<sub>2</sub>Te<sub>3</sub> interface</b> Emanuele Longo		A-1382 <b>Spin-Wave Optics in Magnetization Landscapes</b> Marc Vogel		A-1632 <b>Solving large-scale magnetostatic problems in finite-element micromagnetics with H<sub>2</sub> matrices</b> Riccardo Hertel	11:00	
11:15	A-1805 <b>Spin-charge interconversion in Bismuth films grown on Ge (111)</b> Alain Marty	A-1634 <b>Magnetic Order and Its Loss on Honeycomb-Lattice Monolayers and Bilayers: An Illustrative Use of the Coupled Cluster Method</b> Raymond Bishop	A-1383 <b>Spin waves in nanometer epitaxial Galfenol films driven by ultrafast changes of magnetic anisotropy</b> Nikolai Khokhlov	A-1405 <b>Fingerprints of Mn 12, the forefather of Molecular Nanomagnets</b> Alessandro Chiesa	A-1814 <b>Massively parallel micromagnetic simulations of small-size nanoelements with applications to STT-MRAM devices</b> Dmitry Berkov	11:15	
11:30	A-1827 <b>Spin-orbit torque-ferromagnetic resonance with topological insulators</b> Frédéric Bonell	A-1097 <b>Multiple monopole phase transitions in spin ice</b> Peter Holdsworth	A-1408 <b>Significantly enhanced magnon-photon coupling in an inverted split-ring resonator/ thin film YIG hybrid system</b> Bosung Kim	A-1493 <b>Coherent coupling of molecular spins with microwave photons in planar superconducting resonators</b> Claudio Bonizzoni	A-1901 <b>A 2.5D micromagnetic solver for randomly distributed magnetic thin objects</b> Alessandra Manzin	11:30	
11:45	A-2006 <b>First-principles method of calculating spin-orbit torque (SOT) in Co / heavy metal and Co/ topological insulator heterostructures</b> Md Fhokrul Islam	A-1905 <b>Experimental investigation of kagomé artificial colloidal ice</b> Anne Le Cunuder	A-1549 <b>Nanoscale spin-wave circuits based on engineered reconfigurable spin-textures</b> Edoardo Albisetti	A-1659 <b>Anisotropy of Co II transferred to the Cr 7 Co polymetallic cluster via strong exchange interactions</b> Elena Garlatti	A-2016 <b>Numerical integration of generalized Landau-Lifshitz-Gilbert equation based on the mid-point rule</b> Claudio Serpico	11:45	
12:00	A-2007 <b>Highly efficient spin-to-charge current conversion in strained HgTe surface states protected by a HgCdTe layer</b> Paul Noël	A-1658 <b>Dynamical magnetic properties of interacting ultra-small nanoparticle systems</b> Roland Mathieu	A-1611 <b>Direct observation of broadband coherent magnetization wave emissions from magnetic domain walls</b> Rasmus Bahne Holländer	A-2084 <b>Coherent coupling between CsNiCr single-domain magnetic nanoparticles and microwave photons in a planar waveguide resonator</b> Alberto Ghirri	A-2078 <b>Coupled lattice and spin dynamics from second principle</b> Xu He	12:00	

# 9<sup>th</sup> JEMS Conference 2018 | Rheingoldhalle Mainz

Thursday, 6<sup>th</sup> September 2018



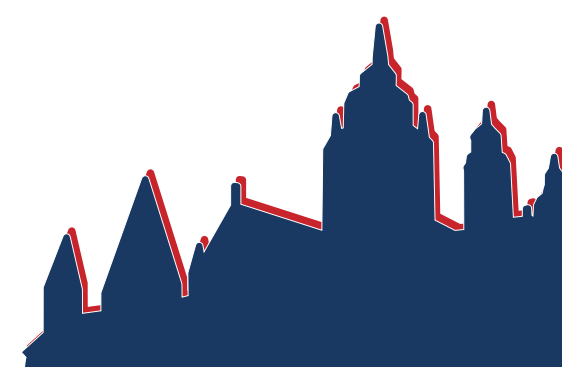
12:15	Lunch break										12:15
12:30	exhibition / poster session										12:30
12:45											12:45
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13:30	SP1 - PARALLEL SESSION 2		SP5 - PARALLEL SESSION 7		SP14 - PARALLEL SESSION 4		SP8 - PARALLEL SESSION 3		SP6 - PARALLEL SESSION 2		13:30
13:45	TBA Eckhard Quandt		A-1819	Magnetic anisotropy and depth-resolved magnetization in Pt/Co 80 Cr 20 /Pt trilayers Farid Fettar	A-1614	Skymion diffusion in thin film multilayers Markus Weißenhofer	A-1450	Magnetoelectronic properties of the non-collinear antiferromagnet Mn 3 Zn 0.5 Ge 0.5 N Christoph Sürgers	TBA Gottschall		13:45
			A-1913	Temperature dependent sign inversion of large uniaxial magnetostriction in the nano-laminated MAX phase Mn 2 GaC Luliia Novoselova	A-1637	Skymion lifetimes in exchange frustrated ultrathin films Stephan von Malottki	A-1274	Angle dependent magnetoresistance in nonmagnet/antiferromagnet metallic heterostructures Samik DuttaGupta			
14:00	A-1602	Local and in-vivo neuronal recordings by micro-sized giant magnetoresistance sensors Jacob Torrejon	A-1930	CMR effect in La1-xSrxMnO3 nanowire networks XianLin Zeng	A-1640	Skymions Driven by Intrinsic Magnons Christina Psaroudaki	A-1950	Probing Pt/Ir x Mn 1-x Interface Magnetism via Spin Hall Magnetoresistance Tae Hee Kim	A-1425	Characteristics and functional properties of Ni-Mn-Ga-Cu alloys Concepcio Segui	14:00
14:15	A-1656	Separation of excitation and detection coils to locate superparamagnetic iron oxide nanoparticles in vivo Melissa M van de Loosdrecht	A-2087	Magnetic properties of (Y1-x Ce 0) Co 5 thin films and bulk single crystals Shalini Sharma	A-1657	Material Systems for Skymions in Co-based Multilayers Bernd Zimmermann	A-2091	Quantum Anomalous Hall Effect and Anderson Chern Insulating Regime in noncollinear Antiferromagnetic 3Q State Adel Abbout	A-2046	Domain wall pinning in magnetic shape memory alloys with small and enlarged magnetic hysteresis Ladislav Straka	14:15
14:30	A-1733	AMR sensors made of La0.67Sr0.33MnO3 epitaxial thin films for neuronal activity measurement Stephane Flament	A-2225	Spin-orbit gaps in ferromagnetic thin films Lukasz Plucinski	A-1682	Speed Limits for Skymions Jan Müller	A-2110	Spin colossal magnetoresistance Zhiyong Qiu	A-1872	Engineering Hierarchical Martensite Twins in Epitaxial Magnetic Shape Memory Films by Tuning Growth Conditions and Post-Growth Treatments Milad Takhsha Ghahfarokhi	14:30
14:45	A-2183	On-chip detection of Malaria-infected red blood cells Riccardo Bertacco	A-2233	Ultrathin antiferromagnetic oxides with tunable properties Lucia Aballe	A-1691	SEMPA investigation of the Dzyaloshinskii-Moriya interaction in the single, ideally grown Co/Pt(111) interface Robert Frömter	A-1789	Spin currents in non-collinear antiferromagnets Jakub Železný	A-1586	Multiple functionalities in pristine and substituted Mn2NiGa driven by site ordering Subhradip Ghosh	14:45
15:00	A-2296	Dynamical Magnetic Response of Iron Oxide Nanoparticles inside Live Cells Francisco J. Teran	A-2254	Imaging the confinement effects on the metamagnetic behavior of FeRh structures Vojtěch Uhlíř	A-1707	Skymions like it Hot – Temperature Dependence of the Skymion Hall Effect Nico Kerber	A-2208	Spin Hall effects in non-collinear antiferromagnetic Mn3X (X = Ir, Sn, Ge) thin-films Edouard Lesne	A-1403	Origin of modulation in Ni2Mn1.4In0.6 magnetic shape memory alloy Parul Devi	15:00
15:15	A-1065	Combined magnetic hyperthermia and drug release by hydrotalcite-coated Fe 3 O 4 nanoparticles Konstantinos Simeonidis	A-2318	Magnetic coupling effects in curvilinear nanomagnets Denys Makarov	A-1758	Simultaneous stabilization of skymions and antiskyrmions in rank-1 DMI materials allowing the concept of a skymion-antiskyrmion racetrack memory Markus Hoffmann	A-1823	Spin Hall magnetoresistance in antiferromagnetic NiO/Pt bilayers Matthias Opel	A-1062	Magneto-optical study of spiral domains in amorphous microwires Alexander Chizhik	15:15
15:30	afternoon coffee break										15:30
15:45											15:45
16:00	SP18 - PS2	/SP2 - PS1	SP5 - PARALLEL SESSION 8		SP14 - PARALLEL SESSION 5		SP8 - PARALLEL SESSION 4		SP9 - PARALLEL SESSION 3		16:00
	TBA Phil D. C. King		A-2411	Comparison between magnetization reversal processes of bi-and tri-segmented diameter modulated nanowire arrays Victor Prida	A-1771	Interlayer Dzyaloshinskii-Moriya interactions Elena Y. Vedmedenko	A-1575	Synthetic antiferromagnetic coupling between ultra-thin insulating garnets Juan M. Gomez-Perez	A-2219	Spin transfer torque ferromagnetic resonance in the magnetic heterostructures: interface transparency and spin memory loss Ankit Kumar	16:00
16:15			A-2421	Co2MnX (X=Si, Ge, Ga, Al, Sn) Half-Metal Magnetic grown by Molecular Beam Epitaxy Stéphane Andrieu	A-1801	Exchange coupling torque in antiferromagnetically coupled Co / Gd bi-layer system Robin Bläsing	A-1680	Spin pumping and enhanced damping in the vicinity of the antiferromagnetic-ferromagnetic phase transition of FeRh Yuyan Wang	A-2398	Atomistic spin- and lattice-dynamics simulations: Method and applications Johan Hellsvik	16:15

# 9<sup>th</sup> JEMS Conference 2018 | Rheingoldhalle Mainz

Thursday, 6<sup>th</sup> September 2018



16:30	A-2037	<b>Spin-split Landau levels of quasi 2D Dirac fermions dependent on antiferromagnetic order in EuMnBi<sub>2</sub></b> Hideaki Sakai	A-1261	<b>3D Reconstruction of Magnetization using Soft X-ray Transmission Tomography</b> Aurelio Hierro Rodriguez	A-1866	<b>Magnetolectric effect and orbital magnetization in skyrmion crystals: New ways for detection and characterization of skyrmions</b> Börge Göbel	A-1374	<b>Interface proximity effects near a domain wall in anti-ferromagnet/superconductor heterostructures</b> Vincent Baltz	A-1763	<b>Spin-orbit phenomena in single crystalline Fe/GaAs (001) hybrid structures</b> Lin Chen		16:30
16:45	A-2161	<b>First-principles studies of transition-metal magnetic impurities in topological Dirac materials</b> Cecilia Holmqvist	A-1079	<b>FexMn1-x/PMN-PT magnetic configuration around ferromagnetic / antiferromagnetic transition</b> Giovanni Maria Vinai	A-1890	<b>Asymmetric Non-collinear Magnetic Domain Wall Motion Induced By Electric Current</b> Mohamed Ali Nsibi	A-1574	<b>Thermally induced ultrafast magnetization dynamics; ferromagnets vs antiferromagnets</b> Unai Atxitia	A-2331	<b>Explicit proof of hole transport across a MgO-based magnetic tunnel junction due to oxygen vacancies</b> Filip Schleicher		16:45
17:00	<b>TBA</b> Sebastian Bergeret		A-1388	<b>Cobalt magnetic moment in Co/Pd multilayers</b> Rafael Morales	A-1892	<b>Phase-locking and modulation in spin torque oscillators</b> Jérémy Létang	A-1684	<b>Thin Film Granular Magneto-electric Antiferromagnets</b> Asser Elsayed	A-2354	<b>Geometric Phase Contributions to the Anomalous Nernst and Hall Effect in the Chiral Double Helimagnetic System</b> Jacob Gayles	Refreshments, Exhibition, and Poster Session C	17:00
17:15			A-1406	<b>Direct probe of electronic and magnetic properties at the g-Al<sub>2</sub>O<sub>3</sub>/SrTiO<sub>3</sub> interface</b> Jose Mardegan	A-1903	<b>Depinning of magnetic domain walls in thin Ferromagnets</b> Vincent Judy	A-2221	<b>Growth and characterization of non-collinear antiferromagnetic Mn<sub>3</sub>Sn films</b> Anastasios Markou	A-2070	<b>Large spin mixing conductance in Bi-doped Cu/YIG interfaces</b> Sandra Ruiz-Gomez		17:15
17:30	A-2409	<b>Dynamic coupling in superconducting/ferromagnet interfaces</b> Javier E. Villegas	A-1418	<b>Insights into magnetic proximity effects at topological insulators/magnetic insulator interfaces using x-ray magnetic circular dichroism</b> Adriana I. Figueroa	A-1907	<b>Two creep regimes induced by strong current actions on ferrimagnetic domain walls</b> Eloi Haltz	A-1088	<b>Ultrafast dynamics of antiferromagnets induced by spin-orbit torques</b> Olena Gomonay	A-2192	<b>Unconventional Superfluidity in Yttrium Iron Garnet Films</b> Thomas Nattermann		17:30
17:45	A-2428	<b>Electronic nematicity and structure in Co-doped LaFeAsO superconductors</b> Liran Wang	A-1553	<b>Altering magnetic and electronic properties of 3d metal ions in cuboid palladate nanoshells by hydrogenation</b> Carolin Schmitz-Antoniak	A-1962	<b>Study of nanoscale laser- and magnetic field-induced domain-wall dynamics</b> Mikhail Logunov	A-1961	<b>Electrical conductivity of antiferromagnetic Dirac quasi-particles</b> Kei Yamamoto	A-2279	<b>Hydrodynamics and topological spin currents in amorphous magnets</b> Ricardo Zarzuela		17:45
18:00	<b>Refreshments, Exhibition, and Poster Session C</b>											18:00
18:15											18:15	
18:30											18:30	
18:45											18:45	
19:00											19:00	



# 9<sup>th</sup> JEMS Conference 2018 | Rheingoldhalle Mainz

Friday, 7<sup>th</sup> September 2018



lecture hall	GUTENBERG-SAAL A (260 THEATRE)		GUTENBERG-SAAL B (260 THEATRE)		GUTENBERG-SAAL C (260 THEATRE)		GUTENBERG-SAAL D (260 THEATRE)		KONGRESS-SAAL (650 THEATRE)		lecture hall	
TIME												TIME
07:00	<b>Registration</b> coffee/tea will be served											07:00
07:15												07:15
07:30												07:30
07:45												07:45
08:00												08:00
08:15												08:15
08:30									<b>Plenary Talk:</b> TBA Laura Heyderman		08:30	
09:15	time for participants to change rooms											09:15
09:20					<b>Semiplenary Talk:</b> TBA Jagadeesh Moodera				<b>Semiplenary Talk:</b> TBA Dieter Suess		09:20	
10:00	<b>morning coffee break</b>											10:00
	<b>SP7 - PARALLEL SESSION 2</b>		<b>SP15 - PARALLEL SESSION 4</b>		<b>SP14 - PARALLEL SESSION 6</b>		<b>SP16 - PARALLEL SESSION 2</b>		<b>SP4 - PARALLEL SESSION 2</b>			
10:15	<b>TBA</b> Amandine Bellec		A-1096	Coherent excitation of hetero-symmetric spin waves with ultrashort wavelengths Sebastian Wintz	<b>TBA</b> Mihai Miron		A-2322	Lanthanide molecular systems as information processing devices for quantum computing David Aguilà	<b>TBA</b> Daniil Karnaushenko		10:15	
10:30			A-1115	Pure spin current driven excitation of propagating spin waves in a spin Hall nano-oscillator Himanshu Fulara			A-2336	Solid-state electron spin lifetime limited by phononic vacuum modes Thomas Astner			10:30	
10:45	A-1794	Gluing lanthanides spins with unpaired electrons inside fullerenes: Towards Single Molecule Magnets (SMMs) with high blocking temperatures Alexey Popov	<b>TBA</b> Csaba Gyorgy		A-1985	Hybrid chiral domain skyrmions in magnetic multilayers Vincent Cros	<b>TBA</b> Martin Plenio		A-1519	Interconnected MTJs as spintronic synapse Eline Raymenants	10:45	
11:00	A-1810	Enhancing the magnetic hybridization of C60 on Fe(001) by two-dimensional oxides Alberto Brambilla			A-2102	Ultrafast and ultrasmall: domain walls and skyrmions in compensated ferrimagnetic thin films Lucas Caretta			A-1646	Reducing transition curvature in heat-assisted magnetic recording with state-of-the-art write heads Christoph Vogler	11:00	
11:15	A-1845	Spin dynamics in high mobility conjugated polymers Sam Schott	A-1154	High-Frequency Dynamics of Honeycomb Artificial Spin Ice in Different Microstates Daan Arroo	A-2128	Multiscale model for the non-centrosymmetric B20-type crystals Sergii Grytsiuk	A-2344	Color centers in diamond: single spin quantum sensors for nanoscale imaging Elke Neu	A-1650	Magnetic memristor driven by spin-orbit torque Byoung-Chul Min	11:15	
11:30	A-2109	Magnetic subunits within a single molecule-surface hybrid Rico Friedrich	A-1177	3D Magnonic crystals and networks Sergey Nikitov	A-2141	Universality of defect-skyrmion interaction profiles Imara L. Fernandes	A-2368	Suppression of superradiance by magnetic correlations Fernando Luis	A-1817	Highly thermally stable sub-20nm magnetic random-access memory based on perpendicular shape anisotropy Steven Lequeux	11:30	
11:45	A-2339	Spin-flip spectroscopy along a molecular spin chain coupled to the ferromagnetic electrodes of a sub-micronic junction Kostantine Katcko	A-1326	Magnon detection in an insulator-spintronics spin valve Joel Cramer	A-2143	Skyrmion formation in SrRuO <sub>3</sub> -SrIrO <sub>3</sub> epitaxial bilayer Hans J. Hug	A-2370	EPR investigations of potential molecular quantum bits Joris van Slageren	A-1838	BEOL compatible top-pinned magnetic tunnel junctions with a synthetic ferromagnetic pinning layer design Johan Swerts	11:45	
12:00	A-2282	Transport regimes of organic spintronic devices and applications in neuromorphic computing Alberto Riminucci	A-1375	Enhanced Spin Wave Group Velocity due to Exchange Coupling in a Ferrimagnetic Insulator/ Ferromagnetic Metal Bilayer Kyongmo An	A-2153	Chiral thin-film magnetic structures display the Mallinson-Halbach effect Miguel A. Marioni	A-2401	Characterization of spin dynamics in open-shell aromatic radicals through EPR spectroscopy Alessandro Lodi	A-1854	Mechanical detection of nanomagnetic phenomena employing coupled nano- and micro-cantilever systems Thomas Mühl	12:00	

12:15	Lunch break / Exhibition										12:15
12:30											12:30
12:45											12:45
13:00											13:00
13:15											13:15
13:30	SP2 - PARALLEL SESSION 2		SP3 - PARALLEL SESSION 4		SP14 - PARALLEL SESSION 7		SP5 - PARALLEL SESSION 9		S11 - PS	/ S4 - PS3	13:30
13:45	TBA Jan Aarts		A-1234	Exotic phenomena in the new frustrated two-leg ladder $\text{Li}_2\text{Cu}_2\text{O}(\text{SO}_4)_2$ Ornella Vaccarelli	A-2157	Velocity enhancement by synchronization of magnetic domain walls Stefania Pizzini	A-1695	Band structure modification and the origin of magnetism in (Ga,Mn)As: from paramagnetic to ferromagnetic phase Oksana Yastrubchak	TBA Marijan Beg		13:45
			A-2395	Magnetic order and single-ion anisotropy in frustrated magnet - $\text{Tb}_3\text{Ga}_5\text{O}_{12}$ Rafal Wawrzynczak	A-2185	Skyrmions with arbitrary topological charge in chiral magnets Filipp N. Rybakov	A-1786	Anisotropic spin-orbit torques in single crystal IrMn/Co/Pt and Pt/Co/Pt thin film multilayers Kyujoon Lee			
14:00	A-1338	Original phenomena in intermetallics with coexisting 3d magnetism and intermediate valent Yb Thomas Mazet	A-2149	Electromagnetic transport in layered pseudo-Kagome cluster magnet $\text{Nb}_3\text{X}_8$ (X = Cl, Br) Jiho Yoon	A-2243	Straight motion of magnetic defects in Fe-N thin films Louis-Charles Garnier	A-1803	Temperature dependent spin polarization in EuO thin film investigated by high resolution ARPES Tristan Heider	A-2082	Experimental and computational study of magnetization reversal in Dy-Co diffused Nd-Fe-B sintered magnets Jérôme Flegans	14:00
14:15	A-1430	Interface effects in superconductor-ferromagnet heterostructures Annika Stellhorn	A-2259	Continuous Easy-Plane Deconfined Phase Transition on the Kagome Lattice Xuefeng Zhang	A-2302	Anisotropic domain wall velocity in quasi-perpendicularly magnetized Ta/Pt/CoFeB/Pt multilayers Sreekar Guddeti	A-1868	Development of superparamagnetism in solution of iron oxide nanoparticles examined with RIXS-MCD Juliusz Kuciakowski	A-2212	Frequency engineering of spin-torque diode Petr Skirdkov	14:15
14:30	A-1655	Two-stage Kondo effect in double quantum dots coupled to ferromagnetic and superconducting leads Krzysztof Wójcik	A-1320	Magnetisation process in the rare earth tetraborides, $\text{NdB}_4$ and $\text{HoB}_4$ Oleg Petrenko	A-2308	Tunable vortex dynamics with ion implantation Lakshmi Ramasubramanian	A-2232	X-ray magneto-optical effects quadratic in magnetization - Voigt and XMLD Dominik Legut	A-2003	SOT-MRAM 300nm integration for low power and ultra-fast embedded memories Kiran Kumar Vudya Sethu	14:30
14:45	A-2228	Tuning the energy of Yu-Shiba-Rusinov states on a superconducting Pb film Luigi Malavolti	A-1585	Topological classification of magnetic plateaux in spin-1/2 Heisenberg multimer chains Isao Maruyama	A-2343	Chiral spin spiral and isolated skyrmions with vanishing anisotropy in Co / Ru(0001) Timofey Balashov	A-2414	XMCD investigation of ultra-thin maghemite Gustavo Gomes	A-2048	Spin-orbit torque induced domain switching in anti-ferromagnet/ferromagnet heterostructures Gunasheel Kautwilyaa Krishnaswamy	14:45
15:00	A-2268	Orbital Selective Physics and Mottness in Iron-based Superconductor $\text{KFe}_2\text{As}_2$ Xianggang Qiu	A-1999	Magnetic ordering and open volume defects - phase transitions in ion irradiated Fe 60 Al 40 thin films Maciej Oskar Liedke	A-2420	Towards retrieving the 3D Spin Texture of Skyrmions in Thin Helimagnets Bernd Rellinghaus	A-2301	Nanostructures akin to graphene as attractive candidates for spintronic applications Stefan Krompiewski	A-2371	Reading magnetic patterns/ media with magnetoresistive sensors Karla J. Merazzo	15:00
15:15	A-2329	Tunable proximity effect in YBCO-graphene junctions David Perconte	A-2382	Spin dynamics of the classical spin nematic spinel $\text{LiGa}_{0.95}\text{In}_{0.05}\text{Cr}_4\text{O}_8$ Goran Jan Nilsen	A-1041	Polymorphism of the low-temperature metastable magnetic states in a strained FeGe lamella Victor Ukleev	A-1150	Electric field-controlled interface spin states in quantum tunneling devices using interface-resolved magnetic mapping Sayani Majumdar	A-1260	Time-resolved measurements of the switching of Spin Transfer Torque Random Access Memory down to the nanosecond scale Paul Bouquín	15:15

