

International Symposium Spin Waves 2018

Scientific Program

Monday, June 4

09.00-10.00	Registration	
10.00-10.15	Opening ceremony	
10.15-11.15	Session 1	Magnetic excitations in topological matter
10.15-10.45	Roland Weisendanger (invited)	Topological States in Low-Dimensional Magnetic Systems
10.45-11.00	Petr Skirdkov	Spin pumping and probe in permalloy dots-topological insulator bilayers
11.00-11.15	Zukhra Gareeva	Low and high frequency dynamics of magnetic skyrmions in nanodots
11.15-11.45	Coffee break	
11.45-13.00	Session 2	Magnonics-I
11.45-12.15	Dany Lachance-Quirion (invited)	Hybrid quantum systems with magnons
12.15-12.30	Yury Filimonov	Brillouin light scattering investigation of the spin wave beam focusing effect under excitation by curved transducer
12.30-12.45	Shang-Fan Lee	Simulation on angular dependent transmission of spin waves and the induced domain wall motions in perpendicular-magnetic-anisotropy materials
12.45-13.00	David Osuna Ruiz	Propagating Spiral Spin Waves in Magnetic Nano-patches
13.00-15.00	Lunch	
15.00-17.00	Session 3	Magnonics-II
15.00-15.15	Andrei Slavin	Current-induced magnetization dynamics in antiferromagnets: generation of THz-frequency signals
15.15-15.30	Sergey Nikitov	Magnonics- from microwave to terahertz
15.30-15.45	Pascal Frey	Propagation of spin waves in width-modulated magnonic crystals
15.45-16.00	Frank Heussner	Frequency-division multiplexing in magnonic logic networks based on caustic-like spin-wave beams
16.00-16.15	Farkhad Aliev	Broadband communication and information processing with confined magnon modes
16:15-16.30	Andrey Fraerman	Nonreciprocal spin waves propagation in curvilinear ferromagnetic nanowires
16.30-16.45	Yuri Khivintsev	Signal transmission enhancement in YIG network at spin wave resonance
16.45-17.00	Presentation of IEEE Magnetics Society (by the IEEE fellow Andrei Slavin)	
17.00-17.30	Coffee-break	
17.30-18.45	Session 4	Magnetoacoustics
17.30-17.45	Valentin Besse	Theoretical description of phonon-magnon interactions at the nano-scale
17.45-18.00	Vladimir Vlasov	Magnetization switching of elliptical magnetic nanoparticle by ultrashort pulses of surface acoustic waves
18.00-18.15	Natalia Polzikova	Theoretical and experimental investigations of spin pumping via bulk acoustic waves in resonator with YIG/Pt
18.15-18.30	Aleksandr Andrienko	Observation of the Sample Elastic Eigenmode Excitation under Oblique Microwave Pumping of Magnetoelastic Waves in Hematite
18.30-18:45	Andrey Azovtsev	Spin waves and currents generated by travelling elastic waves in ferromagnetic heterostructures
18.45-20.00	Welcome party	

Tuesday, June 5

09.00-10.45	Session 5	Excitations in low-dimensional magnets
09.00-09.30	Mike Zhitomirsky (invited)	Exotic magnetic structures in frustrated magnets: from competing interactions to disorder induced jamming
09.30-09.45	Stanislav Nikitin	Quantum spin dynamics of quasi-1D Ising spin chains in an exotic longitudinal spin-density wave phase
09.45-10.00	Alexander Smirnov	Static vs. dynamic fluctuations in a triangular antiferromagnet: experiment
10.00-10.15	Yuriy Sakhratov	Magnetic structure of the quasi-two-dimensional antiferromagnet $\text{Rb}_{(1-x)}\text{Fe}_x(\text{MoO}_4)_2$ probed by ^{87}Rb NMR
10.15-10.30	Yulia Krasnikova	Relaxation of spin excitations in strong-leg spin ladder with non-magnetic doping
10:30-10:45	Alexander Moskvina	Unconventional features of the antiphase domain walls in the model $S=1$ (pseudo)spin 2D system
10.45-11.15	Coffee break	

11.15-13.00	Session 6	Magnetophotonics
11.15-11.45	Tatiana Murzina (invited)	Spectroscopic studies of planar Ag+Py magneto-plasmonic crystals
11.45-12.00	Mikhail Kostylev	Microwave to optical photon conversion by means of travelling-wave magnons in YIG films
12.00-12.15	Olga Borovkova	TMOKE in the Plasmonic Diluted Magnetic Semiconductor Nanostructures
12.15-12.30	Yan Sun	Magnetic and magneto-optical studies of low-dimensional materials
12.30-12.45	Leonid Kulik	Transport of optically pumped spin in magnetized 2D electron system
12.45-13.00	Presentation of NKT Photonics	
13.00-15.00	Lunch	

15.00-17.00	Session 7	Exotic magnetic phases
15.00-15.30	Yuri Bunkov (invited)	Spin superfluidity from ultralow to room temperature
15.30-16.00	Edouard Sonin (invited)	Spin superfluidity: superfluid ^3He , solids, spinor BEC
16.00-16.15	Kirill Povarov	Quantum criticality in DTNX at zero field and pressure
16.15-16.30	Timofey Soldatov	ESR of a doped quasi-1D $S = 1$ antiferromagnet $\text{NiCl}_2\text{-4SC}(\text{NH}_2)_2$
16.30-16.45	Nikolay Sluchanko	Anisotropy of magnetoresistance and magnetic H-T phase diagram of a cage-glass antiferromagnet $\text{Ho}_{0.8}\text{Lu}_{0.2}\text{B}_{12}$
16.45-17.00	Margarita Iakovleva	Spin dynamics in the $S = 1/2$ honeycomb lattice compound $\text{InCu}_{2/3}\text{V}_{1/3}\text{O}_3$ probed by magnetic resonance techniques
17.00-19.00	Poster session and refreshments	

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Wednesday, June 6

09.00-11.05	Session 8	Ultrafast magnetization dynamics
09.00-09.20	Andrei Kirilyuk Roman Pisarev	In memory of Jean-Yves Bigot and Eric Beaurepaire
09.20-09.50	Hermann Dürr (invited)	Magnon condensation and magnetic pattern formation far from equilibrium
09.50-10.20	Jan Lüning (invited)	t.b.a.
10.20-10.35	Alexander Yaroslavtsev	Ultrafast magnetization dynamics of FeRh
10:35-10:50	Guido Bonfiglio	Ultrafast magnetization dynamics of the ferrimagnetic Heusler alloy Mn_2Ru_xGa
10:50-11:05	Johan Mentink	Quantum many-body dynamics of the Einstein-de Haas effect
11.05-11.30		Coffee break
11.30-13.00	Session 9	Control of THz spin excitations in antiferromagnets
11.30-12.00	Alexey Kimel (invited)	THz magnonics: generation, propagation and detection of THz spins waves
12.00-12.15	Evgeny Mashkovich	Spin waves in magnets induced by intense THz pulses
12.15-12.30	Christian Tzschaschel	Temperature dependent spin damping in antiferromagnetic $h-RMnO_3$
12.30-12.45	Ansar Safin	Nonlinear dynamics of the antiferromagnetic THz-frequency spintronic oscillator
12.45-13.00	Leonid Kotov	Ultrafast magnetic switching in antiferromagnetic nanoparticles excited by microwave pulses
13.00-15.00		Lunch
15.00-18.30		Excursion to the State Hermitage Museum
18.30-21.30		Symposium dinner

09.00-10.45	Session 10	Laser-induced spin waves
09.00-09.30	Anatoliy Zvezdin (invited)	Mechanism of ultrafast all-optical magnetization switching in iron garnet
09.30-10.00	Vladimir Belotelov (invited)	Optical excitation of magnetization dynamics in magnetophotonic structures by fs-laser pulses
10.00-10.15	Krzysztof Szerenos	Spectrally selective all-optical magnetic switching in a dielectric garnet
10.15-10.30	Mikhail Kozhaev	Optically excited ultrafast magnetization dynamics in Bi-substituted iron garnet with domain structure
10.30-10.45	Leonid Shelukhin	Ultrafast laser-induced quenching of perpendicular magnetic anisotropy in a magnetic tunnel junction structure
10.45-11.15	Coffee-break	
11.15-13.00	Session 11	Spin dynamics in nanostructures
11.15-11.45	Alexander Samardak (invited)	Brillouin light scattering spectroscopy of the interfacial Dzyaloshinskii-Moriya interaction in ultrathin magnetic films
11.45-12.00	Andrey Stashkevich	Understanding the interfacial nature of the Dzyaloshinskii-Moriya interaction and proximity induced magnetism
12.00-12.15	Arseny Savitsky	Twisted magnetization states and inhomogeneous resonance modes in an Fe/Gd ferrimagnetic multilayer
12.15-12.30	Victor Mironov	Ferromagnetic resonance of individual domain wall in V-shaped nanowire
12.30-12.45	Zhigao Sheng	High magnetic field visualization of antiferromagnetic phase dynamics
12.45-13.00	Veniamin Kozub	Magnetic excitations in ferromagnetic glass
13.00-15.00	Lunch	
15.00-16.00	Session 12	Low-dimensional and exotic magnetic structures
15.00-15.15	Anatoly Tsvyashchenko	Magnetism of B20-type transition-metal monogermanides: Experiment and <i>ab initio</i> calculations
15.15-15.30	Oleg Utesov	Polymorphism of low-temperature states in strained B20 helimagnets
15.30-15.45	Attila Szilva	Theory of non-collinear interactions beyond Heisenberg exchange: applications to bcc Fe
15.45-16.00	Valentin Irkhin	Magnetic phase diagrams in strongly correlated systems: Hartree-Fock and slave boson approaches
16.00-16.30	Coffee break	
16.30-18.30	Session 13	Spectroscopy of spin excitations
16.30-17.00	Andrei Sirenko (invited)	Optical spectroscopy of magnons, electromagnons, phonons, and crystal field excitations in orthoferrites RFeO ₃
17.00-17.15	Mikhail Prosnikov	Spin dynamics in the low-symmetry antiferromagnet NiWO ₄
17.15-17.30	Dávid Szaller	Exotic magnetoelectric excitations of the multiferroic SmFe ₃ (BO ₃) ₄
17.30-17.45	Takase Koichi	Unusual electronic state of the Mn 3d in the layered Mott insulator (LaO)MnAs
17.45-18.00	Marcin Bialek	Spin-wave resonances in bismuth orthoferrite at high temperatures
18.00-18.30	Andrei Pimenov (invited)	Voltage control of magnetoelectric excitations
18.30-18.45	Closing remarks	