



ASPIRE
先端国際共同研究推進事業



Germany-Tohoku Workshop on Spintronics -

Quantum & computational spintronics - ideas, exchange, collaboration



FRIDAY, 2 OCTOBER 2026

9:00 AM - 5:30 PM

Venue: Conference Room, 4th floor, Laboratory for Nanoelectronics and Spintronics

Map: Tohoku University Katahira Campus https://www.tohoku.ac.jp/map/en/?f=KH_E04

ABOUT THE WORKSHOP

This workshop is a satellite to the Spin Mechanics 9 Conference in Kyoto (sites.google.com/view/spinmechanics9). We bring distinguished experts from Germany on quantum and computational spintronics together with the spintronics community of Tohoku University for an intense exchange of ideas, hoping to germinate new collaborations that fulfil the aspirations of the JST ASPIRE programs.

09:00 - 12:30

Magnetization Dynamics

14:00 - 17:30

Quantum Magnonics

INVITED SPEAKERS FROM GERMANY



Olena Gomonyay

Professor
Theoretical and computational
spintronics.

Johannes Gutenberg-Universität
Mainz, IEEE-DL



Akashdeep Kamra

Professor
Theory of Spin Systems
RPTU Kaiserslautern-Landau



Silvia V. Kusminskiy

Professor
Head, Theory of Hybrid Quantum Systems
Institute for Theoretical Solid State
Physics RWTH Aachen University



Ulrich Nowak

Professor
Theory of Magnetic Materials
University of Konstanz

Organized by Tohoku University

Shunsuke Fukami | Atsufumi Hirohata | Shigemi Mizukami | Gerrit Bauer

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Programme

Friday, 2 October 2026 | 09:00 - 17:30

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TIME	SPEAKER / AFFILIATION	TALK
08:30-09:00	Welcome	
09:00-09:30	Olena Gomonay Mainz	Fast and Efficient Excitation of Spin Waves in Antiferro/Altermagnets
09:30-10:00	Jiahao Han CSIS	Unconventional magnetic and electronic responses in chiral antiferromagnets
10:00-10:30	Ryuhei Kohno SRIS	Oersted-field control of a spin-wave signal in Bi-doped YIG detected by the inverse spin Hall effect
10:30-11:00	Break	
11:00-11:30	Ulrich Nowak Konstanz	Magnon-phonon interaction: from antiferromagnets to altermagnets
11:30-12:00	Ping Tang IMR	Pseudospin dynamics of charge order
12:00-12:30	Shun Kanai RIEC	What does the attempt time reveal about the role of spin-wave instabilities in nanomagnet reversal
12:30-14:00	Lunch (free time)	
14:00-14:30	Akashdeep Kamra Kaiserslautern	Coupled excitons and magnons in van der Waals magnets
14:30-15:00	Mehrdad Elyasi AIMR	Nonlinear magnonics for controlling fluctuations in magnets
15:00-15:30	Mingran Xu Physics Dept.	Nonreciprocity in surface acoustic wave driven magnetization dynamics
15:30-16:00	Break	
16:00-16:30	Silvia V. Kusminskiy Aachen	Harnessing Light to Generate and Probe Magnons in Two-Dimensional Magnets
16:30-17:00	Tomohiro Otsuka AIMR	Semiconductor Spin Qubits and Emerging Material Platforms
17:00-17:30	Martijn Dols Aachen/Sendai	Chiral and non-reciprocal magnons for quantum protocols on spin qubits

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