

Retreat-Meeting SPP2137

Skyrmionics

Topological Spin Phenomena in Real-Space for Applications

Program

27. February 2019

Lecture Hall 0220

10.00	Welcome
10:05	Markus Preissinger, University of Augsburg Magnetic Skyrmions of Different Origins
10:25	Alfonso Chacon , Technical University of Munich Observation of two independent skyrmion phases in a chiral magnet
10:45	Anastasios Markou, MPI-CPfS Dresden Antiskyrmion phase in tetragonal Heusler compounds
11:05	Lukas Heinen , University of Cologne Helimagnons revisited
11:25	Mathias Weiler, WMI Munich Helimagnon resonances in a natural magnonic crystal
11:45	Aisha Aqeel , Technical University of Munich Bragg scattering FMR on the chiral magnet Cu ₂ OSeO ₃

Immatrikulationshalle

12:15	Lunch break
13:00	Poster session

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15:00	Alex Bogdanov , IFW Dresden Magnetic skyrmions-bubble hybrids in nanolayers of metallic ferromagnets
15:20	Martin Stier , University of Hamburg Controlling the Skyrmion Hall angle of current-driven Skyrmions by spin-orbit interaction
15:40	Ionela Lindfors-Vrejoiu , Universty of Cologne Berry phase engineering versus formation of skyrmions in SrRuO ₃ /SrlrO ₃ heterostructures
16:00	Jeffrey McCord , University of Greifswald <i>Probing skyrmion local energy landscapes in Ta/CoFeB/MgO by size</i> <i>and motion</i>

16:20	Ilya Eremin, University of Bochum Proximity-induced effects and novel functionalities in superconducting/ferromagnetc heterostructures with magnetic skyrmions
16:40	Christian Pfleiderer , Technical University of Munich Information on Organizational Matters (retreat meetings, international conference, 2 nd funding period,)
17:00	End of session
18:30	Dinner (pay yourself) Augustiner-Keller, Arnulfstrasse 52, 80355 München

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9:00	Ricardo Zarzuela, University of Mainz Skyrmion dynamics in two and three dimensions
9:20	Markus Garst, Technical University of Dresden Solitary wave excitations of skyrmion strings in chiral magnets
9:40	Samir Lounis, Forschungszentrum Jülich & RWTH Aachen Universality of defect-skyrmion interaction profiles
10:00	Sergiy Mankovsky , LMU Munich Exchange coupling parameters calculated via the fully relativistic Korringa-Kohn-Rostoker Green function approach
10:20	Coffee break
10:50	Selection of Young Researchers Representative Organisational Matters: Graduate Students & Postdocs
11:10	Bernd Rellinghaus , Technical University of Dresden Skymions in 3D – a status report
11:30	John Gaida , University of Göttingen Ultrafast Lorentz Microscopy: A tool to study laser- and current-driven magnetization dynamics
11:50	Matthias Bode , University of Würzburg Skyrmions in antiferromagnetic and highly anisotropic environments
12:10	Sebastian Mühlbauer , Technical University of Munich Neutron diffractive imaging of the skyrmion lattice nucleation in MnSi
12:30	Concluding remarks

Immatrikulationshalle

12:40	Lunch break
14:00	End of meeting