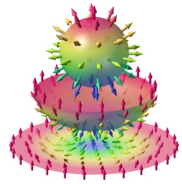


Retreat- & Networking-Meeting SPP2137



Skymionics Topological Spin Phenomena in Real-Space for Applications

Program

3. September 2020

- Chair:* *Stefan Blügel (onsite)*
- 9:15 **Christian Pfeiderer** (onsite), Technical University of Munich
Goals and Organization of the Priority Program on Skymionics
- 9:45 **Ellen Reister** (remote), Deutsche Forschungsgemeinschaft
Formal Aspects of Priority Programs (Proposals, funding & more)
- 10:30 coffee break
- Chair:* *Achim Rosch (onsite)*
- 11:00 **Volodymyr Kravtchuk** (onsite), Karlsruhe Institute for Technology
Geometrical phenomena in chiral magnets
- 11:20 **Fabian Lux** (remote), Forschungszentrum Jülich
Signatures of the Chiral Hall Effect in Noncollinear Magnets
- 11:40 **Vladyslav Kuchkin** (onsite), Forschungszentrum Jülich
Diverse 2D and 3D chiral solitons and their dynamical properties
- 12:00 **Discussion on new facets of Skymions**
- 12:30 lunch break
- Chair:* *Ilya Eremin (onsite)*
- 14:00 **Martin Stier** (onsite), University of Hamburg
Skymions under constraints
- 14:20 **Samme Dahir** (onsite), University of Bochum
Novel features of superconducting/chiral-ferromagnetic heterostructures with chiral magnetic skymions
- 14:40 **Achim Rosch** (onsite), University of Cologne
Skymion and tetron lattices in twisted bilayer graphene
- 15:00 **Discussion on Skymions in novel settings**
- 15:30 coffee break

3. September 2020 ctd.

- Chair: *Olena Gomonay (onsite)*
- 16:00 **Wulf Wulfhekel** (onsite), Karlsruhe Institute for Technology
Skyrmion annihilation and proximity effect in Co/Ru(0001)
- 16:20 **Stefan Krause** (remote), University of Hamburg
Atomic-scale skyrmions driven by lateral spin-polarized currents
- 16:40 **Kirsten von Bergmann** (remote), University of Hamburg
Zero-field skyrmions in ultrathin films, imaged with spin-polarized STM
- 17:00 **Discussion on Skyrmions at surfaces**
- 18:00 Dinner

4. September 2020

- Chair: *Stefan Blügel (onsite)*
- 9:00 **Alex Bogdanov** (onsite), IFW Dresden
Magnetic Skyrmions, Quo Vadis?
- 9:20 **Alexander Suhkanov** (onsite), Technical University of Dresden
Anisotropic mesoscale magnetic texture in $Mn_{1.4}PtSn$
- 9:40 **Claudia Felser** (remote), MPI-CPfS Dresden
Skyrmions in Heusler
- 10:00 **Discussion on Skyrmions in bulk materials**
- 10:30 Coffee break
- Chair: *Nicolai Kiselev (onsite)*
- 11:00 **Olena Gomonay** (onsite), University of Mainz
Nonlinear magnon coupling mediated by the T-domain wall in NiO antiferromagnet
- 11:20 **Maria Azahr** (onsite), Karlsruhe Institute for Technology
All-electrical detection of skyrmion lattice state and chiral surface twists
- 11:40 **Venkata Krishna Bharadwaj** (remote), University of Mainz
Stability and dynamics of in-plane Skyrmions
- 12:00 **Discussion on Skyrmions in thin films and thin samples**
- 12:30 Clarification of last minute questions (*E. Reister & C. Pfleiderer*)
- 12:45 Lunch break (end of meeting)