

# **Bridging Length Scales in Magnetism – Diffuse Scattering from the Atomic to the Mesoscale**

**812. WE-Heraeus-Seminar**

**16 - 19 June 2024**

**at the  
Physikzentrum, Bad Honnef, Germany**

**WILHELM UND ELSE  
HERAEUS-STIFTUNG**



# Program

## Sunday, 16 June 2024

17:00 – 21:00	Registration	
From 18:00	<i>BUFFET SUPPER</i>	
19:30 – 19:45	Scientific organizers	<b>Opening and Welcome</b>
19:45 – 20:30	Collin Broholm	<b>Diffuse neutron scattering from frustrated magnets</b>

## Monday, 17 June 2024

08:00 – 09:00	<i>BREAKFAST</i>	
09:00 – 09:45	Johanna Jochum	<b>Dynamics of diffusely scattering magnetic phenomena</b>
09:45 – 10:15	Cedric Gommès	<b>Stochastic models for small-angle scattering analysis in disordered systems</b>
10:15 – 11:00	<i>COFFEE BREAK</i>	
11:00 – 11:45	Joseph Paddison	<b>Understanding Spin Textures Using Magnetic Diffuse Scattering</b>
11:45 – 12:15	Lukas Beddrich	<b>The influence of dipolar interactions on the critical dynamics in Ni investigated by high-resolution neutron spectroscopy</b>
12:15	<i>LUNCH</i>	
14:30 – 15:15	Annika Stellhorn	<b>Polarized SANS and GISANS at the ESS</b>
15:15 – 15:45	<b>Posterflash</b>	
15:45 – 16:30	<i>COFFEE BREAK</i>	
16:30 – 17:30	<b>Poster Session</b>	
18:30	<i>DINNER</i>	

# Program

**Tuesday, 18 June 2024**

08:00 – 09:00	<i>BREAKFAST</i>	
09:00 – 09:45	Alexander Tsirlin	<b>Frustration vs. randomness in spin-1/2 triangular antiferromagnets</b>
09:45 – 10:15	Robert Georgii	<b>A Time-of-flight Crystal Analyzer Spectrometer for FRM II</b>
10:15 – 11:00	<i>COFFEE BREAK</i>	
11:00 – 11:45	Robert Cubitt	<b>Going to Great Lengths in Superconductivity</b>
11:45 – 12:15	Elizabeth Martín Jefremovas	<b>Magnetic super-structures in <math>\text{RCu}_2</math> (<math>\text{R} \equiv \text{Nd, Tb}</math>) nanoparticle ensembles</b>
12:15	<i>LUNCH</i>	
14:30 – 15:15	Yixi Su	<b>Highly tunable magnetism in magnetic kagome metals <math>\text{RMn}_6\text{Sn}_6</math></b>
15:15 – 15:30	Ivan Titov	<b>Novel Angular Anisotropy in Polarized Magnetic Small-Angle Neutron Scattering</b>
15:30 – 15:45	Steven Parnell	<b>Probing longer magnetic correlation lengths using spin echo modulated small angle neutron scattering (SEMSANS)</b>
15:45 – 16:30	<i>COFFEE BREAK</i>	
16:30 – 17:15	Henrik M. Rønnow	<b>Neutron studies of <math>\text{SrCu}_2(\text{BO}_3)_2</math> under extreme conditions – a fruit fly for quantum many body physics</b>
17:15 – 18:00	Elizabeth Blackburn	<b>Magnetic dynamics in the small angle regime</b>
18:30	<i>HERAEUS - DINNER</i> <i>(social event with cold &amp; warm buffet and complimentary drinks)</i>	

# Program

**Wednesday, 19 June 2024**

08:00 – 09:00	<i>BREAKFAST</i>	
09:00 – 09:45	Andrew Wildes	<b>Neutron diffuse scattering, and disorder on the atomic scale</b>
09:45 – 10:00	Nahal Rouzbeh	<b>Magnetic Morphology and Exchange-Coupling in Cobalt-Doped Iron Oxide Core-Shell Nanoparticles</b>
10:00 – 10:15	Michael Philipp Adams	<b>Signature of surface anisotropy in the spin-flip neutron scattering cross section of spherical nanoparticles: Atomistic simulations and analytical theory</b>
10:15 – 11:00	<i>COFFEE BREAK</i>	
11:00 – 11:45	Alex Backs	<b>Magnetic Neutron Imaging – Methods &amp; Applications</b>
11:45 – 12:15	Ahmed Alshemi	<b>Investigating the superconducting state of <math>2H-NbS_2</math> as seen by the vortex lattice</b>
12:15 – 14:30	<i>LUNCH</i>	

***End of the seminar and departure***