

# Programme

**Lecture 1: Dr. Andreas Schnyder**, MPI-FKF Stuttgart

*“Topology of semimetals”*

Research talk: Raymond Wiedmann & Kirill Parshukov on *“The topology of altermagnetic insulators, metals and superconductors”*

**Lecture 2: Prof. Marein Rahn**, Uni Augsburg

*“Neutron scattering from quantum matter”*

**Lecture 3: Dr. Marc Wilde**, TUM

*“Fermi Surfaces and Quantum Oscillations”*

**Lecture 4: Dr. Alexander Mook**, Johannes Gutenberg-Universität Mainz

*“Topology in Ordered Magnets: Textures and Dynamics”*

Research talk: Rhea Hoyer on *“Magnon topology beyond single magnons and magnon thermal transport”*

**Lecture 5: Prof. Rinsuke Yamada**, University of Tokyo

*“Emergent transport responses in correlated topological materials”*

Research talk: Daiki Yamaguchi on *“Electrical and thermal transport properties in itinerant noncollinear magnets”*

**Lecture 6: Prof. Ana Akrap**, University of Zagreb

*“Magneto-optical spectroscopy of topological materials”*

Research talk: David Santos Cottin on *“TIBiSSe: A Textbook 3D Dirac Semimetal”*

**Lecture 7: Prof. Markus Heyl**, Uni Augsburg

*“Solving 2D quantum matter with neural quantum states”*

Research talk: Tobias Wiener on *“Dynamics of 2D quantum Ising models with neural quantum states”*



## TRR 360 MGK Spring School 2025

### School on Topology

**April 7–10th**

**Flax Allgäu**  
Schlossstr.4  
87463 Dietmannsried

	Mon 07.04.24	Tues 08.04.25	Wed 09.04.25	Thu 10.04.25
		Breakfast	Breakfast	Breakfast + check out
9:00	<b>Bus transfers</b> Dietmannsried RE75 – Hotel 10:20 & 10:40 AM	<b>Lecture 3:</b> <b>Fermi Surfaces and Quantum Oscillations</b> <i>Marc Wilde</i>	<b>Lecture 4 (part 2):</b> <i>Alex Mook</i>	<b>Lecture 5 (part 2):</b> <i>Rinsuke Yamada</i>
			<b>Research talk 4:</b> <i>Rhea Hoyer</i>	<b>Research talk 5:</b> Daiki Yamaguchi
10:30	Arrival + welcome coffee	Coffee break	Coffee break	Coffee break
11:00	Opening	<b>Lecture 4 (part 1):</b> <b>Topology in ordered magnets: Textures and Dynamics</b> <i>Alex Mook</i>	<b>Lecture 5 (part 1):</b> <b>Emergent transport responses in correlated topological materials</b> <i>Rinsuke Yamada</i>	<b>Lecture 7:</b> <b>Solving 2D quantum matter with neural quantum states</b> <i>Markus Heyl</i>
	<b>Lecture 1 (part 1):</b> <b>Topology of Semimetals</b> <i>Andreas Schnyder</i>			
12:30	Lunch	Lunch	Lunch	Lunch
13:30	<b>Lecture 1 (part 2):</b> <i>Andreas Schnyder</i>	<b>Research talk 1:</b> Raymond Wiedmann, Kirill Parshukov	<b>Lecture 6:</b> <b>Magneto-optical spectroscopy of topological materials</b> <i>Ana Akrap</i>	<b>Research talk 7:</b> Tobias Wiener
		<b>Poster flash talks</b> (18x2min)		<b>TRR Meeting + closing</b>
15:00	Picture + Coffee break	Coffee break	Coffee break	<b>Bus transfers</b> Hotel – Dietmannsried RE75 3:18pm to Kempten 3:42pm to Memmingen
15:30	<b>Lecture 2:</b> <b>Neutron scattering from quantum matter</b> <i>Marein Rahn</i>	<b>Social activities</b> <ul style="list-style-type: none"> <li>• Hiking</li> <li>• Bowling</li> <li>• Climbing</li> </ul>	<b>Research talk 6:</b> David Santos Cottin	
			<b>Poster flash talks</b> (17x2min)	
17:00	Discussion time + check in		Poster session 2	
18:00	Dinner	Dinner	Dinner	
19:00	Pub quiz	Poster session 1		
20:00				