

Future Directions in Quantum Science

Schloss Ringberg, 22.09.24 – 25.09.24

Organisers: Uri Vool and Claire Donnelly

22.09.2024

Time	Speaker	Topic
17:00	Claire Donnelly, Uri Vool	Welcome and intro

23.09.2024

Time	Speaker	Topic
9:00 - 9:45	Lucas Caretta	Unconventional polar phenomena in epitaxial quantum materials
9:45 - 10:30	Angela Wittmann	Exploring spin at hybrid molecule magnetic interfaces
10:30 - 11:00	Coffee	
11:00 - 11:45	Libor Smeljkol	Unconventional magnetic quantum phases and spin symmetries
11:45 - 12:30	Morten Kjaergaard	Self-validating Hamiltonian Learning and beyond projective measurements with superconducting qubits
12:30 - 14:00	Lunch	
14:00 - 18:30	Posters/ discussions	
18:30 - 20:00	Dinner	
20:00	Posters	

24.09.2024

Time	Speaker	Topic
9:00 - 9:45	Valla Fatemi	Cross-pollinating superconducting quantum device ideas from mesoscopic physics and tunnel junction circuits
9:45 - 10:30	Nicola Poccia	Cuprate twistrionics for a new generation of macroscopic quantum hardwares
10:30 - 11:00	Coffee	
11:00 - 11:45	Niels Schröter	Chiral Quantum Materials for Chiral Electronics
11:45 - 12:30	Daniela Markovic	Quantum neuromorphic computing with superconducting circuits
12:30 - 14:00	Lunch	
14:00 - 18:30	Social activity / hike	
18:30 – 20:00	Dinner	
20:00 -	Posters	

25.09.2024

Time	Speaker	Topic
9:00 - 9:45	Phillip Wilke	Quantum science with single atoms and molecules on surfaces
9:45 - 10:30	Apa Singha	Quantum sensing with color centres in diamond: challenges and opportunities
10:30 - 11:00	Coffee	
11:00 - 11:45	Rivka Bekenstein	Towards solid-state based quantum metasurfaces
11:45 - 12:30	Nils Engelsen	Ultrahigh-Q mechanical resonators for sensing and quantum optomechanics
12:30 - 14:00	Lunch	