

# SFB BeyondC Autumn Workshop

September 11 & 12, 2023

University of Innsbruck  
 Campus Technik  
 Technikerstraße 13b, 6020 Innsbruck  
[Hörsaaltrakt T13b](#)

## MONDAY, 11.09.2023

	Time	Program	
	12:30 – 12:50	Registration	
Chair – Matthias Bock	12:50 – 13:00	OPENING ceremony	
	13:00 – 13.30	Marius Krumm   UIBK Towards explainable quantum artificial intelligence	Subproject 02
	13:30 – 14.00	Martin Renner   UNIVIE cancelled	Subproject 03
	14:00 - 14:30	Dominik Wild   MPQ Quantum Simulation on Noisy Devices	Subproject 04
	14:30 – 15:00	Liu Qiu   ISTA Quantum Electro-Optics: Towards Superconducting Quantum Networks	Subproject 05
	15:00 – 15:15	Coffee break	
	15:15 – 15:45	Ian Yang   UIBK Garfield States in Superconducting Circuits (in High Q Cavities)	Subproject 06
	15:45 – 16:30	Richard Küng   JKU The randomized measurement toolbox	Subproject 07
	16:30 – 18:30	Poster Session Snacks & beer	Business meeting (Board members only)
	19:00 – ...	Dinner @ <a href="#">Glorious Bastards</a> & Announcement of the Best Poster Award winner	

**TUESDAY, 12.09.2023**

	Time	Program
	08:30 – 09:30	Women's Breakfast @ <a href="#">Bäckerei Ruetz</a>
Chair – Viktor Krutianskii	09:30 – 10:00	Martin Lanthaler   UIBK Rydberg-blockade-based parity quantum optimization Subproject 08
	10:00 – 10:30	Michael Meth   UIBK Simulating Lattice Gauge Theories with Qudits Subproject 09
	10:30 – 10:45	Coffee break
	10:45 – 11:15	Matthias Bock   UIBK Spin squeezing and entanglement generation in two-dimensional ion crystals with up to 105 ions Subproject 10
	11:15 – 11:45	Lee Rozema   UNIVIE Experimental Aspects of Indefinite Causal Order in Quantum Mechanics Subproject 13
	11:45 – 12:15	Sebastian Gstir   UIBK Waveguide Interferometers for Fundamental Investigation of Quantum Mechanics Subproject 14
	12:15 – 12:45	Joshua Morris   UNIVIE Solving rank constrained SDPs in polynomial time Subproject 15
	12:45 – 13:45	Lunch (is not provided)
Chair – Iris Agresti	13:45 – 14:15	James Bate   UIBK Towards extending the storage time for remote entanglement in a quantum network node with an integrated optical cavity Subproject 16
	14:15 – 14:45	Ilya Kull   UNIVIE Lower bounds on ground-state energies of local Hamiltonians through the renormalization group Subproject 17
	14:45 – 14:50	CLOSING ceremony
	14:50 – ...	Lab tours: Meeting point: In front of lecture hall 1