

The Mathematical Foundations of Quantum Mechanics – 25.-28.05.2025

	Su 25.05.	Mo 26.05.25	Tu 27.05.25	Wed 28.05.25
8:00		Breakfast		
			Quantum measurements	History, Quantum Thermodynamics
9:00			D. Bruss Quantum measurements: von Neumann and beyond	M. Janssen Constructing Quantum Mechanics: the Arch
9:45			M. Brune The Quantum Classical Transition	V. Scarani Quantum Thermodynamics
10:30		Coffee Break		
		Opening	Quantum Mathematical Structures II	Quantum Thermodynamics
11:00		Kick-off Lecture: R. Werner Projection Operators, Hidden Variables and all that	P. Lahti Quantum Logic	R. Renner Moving the cut: von Neumann's measurement
11:45			N. Datta Quantum entropies	A. Widera Quantum Thermodynamics with Cold Atoms
12:30		Lunch		
		Quantum Mathematical Structures I	Computer Architectures	Departure
14:00		R. Longo Von Neumann Algebras over the Years	D. DiVincenzo Computer Architectures, von Neumann and Quantum	
14:45		L. van Lujik Von Neumann Algebraic Quantum Information	K. Nowrouzi Optimal Quantum Computing Architecture through Deep Co-Design	
15:30		Coffee Break		
		Von Neumann beyond Quantum	Poster Session	
16:00	Arrivals Registration	Helmut Bölcskei Cellular automata, many-valued logic, and deep neural networks		
16:45		T. Kjeldsen From mathematization of games to mathematical programming		
18:30		Dinner		
19:30		Evening Lecture: Game Theory and Economy		Heraeus Dinner
	B. von Stengel Linear Programming and the Minimax Theorem			