Symposium Foundations of Quantum Theory (SYQT)

jointly organised by
the Quantum Information Division (QI),
the Quantum Optics and Photonics Division (Q), and
the Working Group on Philosophy of Physics (AGPhil)

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The foundations of quantum mechanics are still subject of intense research, even 100 years after the theory was first formulated. In foundations, the underlying concepts and structures of quantum theory are discussed, ranging from philosophical debates to novel mathematical frameworks to experimental tests of quantum theory. The aim of this symposium is to highlight recent developments in the foundations of quantum theory exploring them from both a philosophical and a physics perspective.

Overview of Invited Talks and Sessions

(Lecture hall HS 1+2)

Invited Talks

SYQT 1.1	Wed	11:00–11:30	HS 1+2	**Against 'local causality'** — •Guido Bacciagaluppi
SYQT 1.2	Wed	11:30–12:00	HS 1+2	**Philosophy of Quantum Thermodynamics** — •Carina Prunkl
SYQT 1.3	Wed	12:00–12:30	HS 1+2	**Can quantum information be the underpinning of quantum physics?** — •Paolo Perinotti
SYQT 1.4	Wed	12:30–13:00	HS 1+2	**Spin-bounded correlations: rotation boxes within and beyond quantum theory** — Albert Aloy, •Thomas Galley, Caroline Jones, Stefan Ludescher, Markus Müller

Sessions

SYQT 1.1–1.4	Wed	11:00–13:00	HS 1+2	**Foundations of Quantum Theory**