Speaker: **Jake Papadopoulos, University of Freiburg**

Title: **How indistinguishability and symmetry shape entanglement geometry in two bosons**

Date: **Friday, August 07, 11:00 am (s.t.)**

Place: **Seminar room 915**

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Abtstract:

What does it mean for two identical bosons to be indistinguishable? The answer depends on which degrees of freedom are accessible. In this talk, I discuss two common viewpoints: an internal-overlap definition, based on the distinguishability of hidden internal states, and an operational definition, based on the symmetry support of the reduced external state. I then consider a pure global state of two bosons which, after tracing out internal degrees of freedom, can have antisymmetric support in the reduced external state. I discuss when this antisymmetric support can be interpreted as distinguishability, and how it affects the entanglement geometry of the reduced state and the structure of the states that lie on the maximally entangled mixed state (MEMS) boundary.