

## **MCQM PhD Lecture: Lea Boßmann (Johannes Gutenberg Universität Mainz)**

*Wednesday, 13 March 2024 11:30 (1 hour)*

Title: A brief introduction to the interacting Bose gas

Abstract: Since the first experimental realization of a Bose-Einstein condensate in 1995, the physical and mathematical analysis of the Bose gas has become a very active field of research. In this lecture, I will give a short introduction to the topic from a mathematical perspective. I will focus on spectral properties of interacting Bose gases, in particular on their ground state energy and low-energy excitation spectrum.