

**Speaker:** Andreas Fuchs, University of Freiburg  
**Title:** Entanglement and Quantum State Control for Information Processing  
**Date:** Thursday, April 10th, 10:00 am  
**Place:** Lecture hall (HS) of Hermann-Herder-Straße 5

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**Abstract:**

The encoding and processing of information requires a physical system, whose properties determine the rules of the computation. Employing quantum systems for information processing requires, in particular, the ability to reliably and certifiably prepare the computing platform in (entangled) quantum states. We therefore establish connections between the two fields of quantum control and of quantum information processing, with a particular focus on the central role played by entanglement.