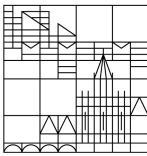


# Physikalisches Kolloquium

Universität  
Konstanz



Di 14.01.20  
15:15 Uhr  
14:45 Uhr, Kaffee/Tee  
R 513



**Prof. Dr. József Fortágh**  
Universität Tübingen

## Quantum interfaces between solids, atoms and light

Quantum science deals with various aspects of physics taking place on the level of single atoms up to large systems with emerging quantum phenomena. It also looks at the development of quantum measurement and quantum information technologies. Several research fields contribute to the breathtaking development in this area, in fields such as condensed matter physics, material- and nano-sciences, cold atomic physics and photonics.

Built on the exchange between researchers in these subfields, our group follows interdisciplinary approaches to deepening insights in quantum science and for the development of innovative technologies.

Atoms, photons, quantum gases, superconducting circuits and nano-mechanical systems make up the quantum toolbox of our group. The grand challenge is here to establish coherent quantum interfaces between these constituents. In this colloquium, I describe our research efforts and results on interfacing ultracold atoms and superconducting circuits.

