







Seminarankündigung

Dienstag, 28. September 2021 17:00 Uhr

ONLINE via ZOOM

https://tum-conf.zoom.us/j/63210679333 Meeting-ID: 632 1067 9333 Kenncode: 075076

"Synthesis, characterization and control of quantum defects for quantum network applications: From deep centers in diamond to shallow impurities in ZnO"

Abstract: Point defects in crystals are the solid state analog to trapped ions. Thus these "quantum defects", which can be integrated into solid-state devices, have gained popularity as qubit candidates for scalable quantum networks. In this talk, I will introduce some of the basic quantum defect properties desirable for quantum network applications and highlight my group's experimental work toward understanding and controlling the spin and optical properties of quantum defects, including (1) synthesis, charge state, frequency and emission control of deep-level vacancy complexes in diamond and (2) quantum coherence properties of donors in ZnO.

Prof. Kai-Mei Fu
University of Washington
Seattle, USA