



Quantum engineered systems

In recent years, there has been rapid development in control and manipulation of coherent quantum systems. These advances allow for the study and utilization of coherent quantum phenomena, as well as the exploration of novel quantum mechanical concepts in realistic many-body setups. My research is centered on the study of electronic, atomic, and photonic systems, with their modern ramifications to topology, strong-correlations, and out-of-equilibrium dynamics, as well as their consequences for fundamental physics and device applications. My research is largely divided into three main pillars: (i) quantum electronic transport, (ii) material properties and quantum simulation of matter and light-matter systems, and (iii) dynamical nonlinear phenomena. In my talk, I will details my interests in these pillars, as well as give examples of selected results.

Prof. Dr. Oded Zilberberg

ETH Zürich, CH

Mo. 14.12.2020, 12:30 Uhr per Videokonferenz:

<https://t1p.de/i63z>