**Recent Advancements in Mid-Infrared Optical Frequency Comb Sources and Spectroscopy**

Optical frequency comb spectroscopy has blossomed into a versatile tool for the broad-bandwidth and high-spectral-resolution study of molecules in the visible and near-infrared. Cavity-Enhanced Direct Frequency Comb Spectroscopy (CE-DFCS) enables measurements with a simultaneous bandwidth of up to hundreds of nm at a frequency resolution comparable to stable CW light sources.
During this talk I will present recent developments of mid-IR frequency comb sources and the application of frequency comb sources for mid-IR spectroscopy. Topics include work on direct frequency comb measurements of OD + CO→DOCO kinetics, continuous probing of cold complex molecules with infrared frequency comb spectroscopy as well as work on cavity ring down spectroscopy for mid-IR mirror characterization.