Abstract Submitted
for the CUWIP21 Meeting of
The American Physical Society

Towards Cavity-Enhanced 2DIR Spectroscopy NEOMI LEWIS, MYLES SILFIES, GRZEGORZ KOWZAN, ANTHONY CATANESE, JAY RUTLEDGE, THOMAS ALLISON, Stony Brook University — We propose a new scheme for two-dimensional spectroscopy using cavity-enhancement techniques in the mid-infrared spectral region to study hydrogen bond networks. The scheme will use two pump beams and one probe beam, generated by several OPAs (optical parametric amplifiers). Phase cycling 2DIR spectroscopy will be achieved through using multiple frequency combs. This project focuses on planning the layout of the system, integrating all the necessary components as well as simulating necessary conditions for measurements.

Neomi Lewis
Stony Brook University

Date submitted: 02 Jan 2021 Electronic form version 1.4