



Physical Science & Engineering / Computational, Environmental, & Life Sciences QIS Seminar

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"Quantum Information Processing with Bulk Optical Nonlinearities"

Host: Salman Habib

Monday, October 19, 2020 1:00 p.m.- 2:00 p.m. BlueJeans Meeting ID 428 870 938 Join Meeting

Abstract:

Extrapolating from past progress in the quality and confinement of photonic cavities and the strength of optical Chi-2 nonlinearities, the ability to perform all optical quantum logic gates is about 10 years away. Here I will describe some schemes for how it could be achieved using only Chi-2 nonlinearities.