Photon pair generation and studies based on emissive type quantum memory using cigar shaped cold atoms

Ravikumar Chinnarasu¹

¹Department of Physics, National Tsing Hua University, Hsinchu 30013, Taiwan

In my talk I will be presenting about our recent results on photons pairs generation using spontaneous four wave mixing. Which can be readily used to realize single photon EIT based quantum memory. And also I will present our recent observation of oscillatory retrieval of emissive based quantum memory using DLCZ photon pair generation scheme in our cigar shaped cold atomic system.