Title: Quantum Light Generation in the THz Regime

Abstract: Light with quantum nature is central to many quantum networking protocols, such as quantum teleportation and secure key distribution. We will discuss the possibility of generating THz entangled photons and single photons by spontaneous parametric down conversion (SPDC). The theoretical treatment of SPDC in the THz regime will also be briefly discussed.

Bio: Chih-Sung Chuu is an associate professor in the Department of Physics at National Tsing Hua University. He received his Ph.D. in Physics from University of Texas at Austin. His research interests include the manipulation of single and entangled photons and applications in quantum information processing.