



IBS Center for Molecular Spectroscopy and Dynamics

COLLOQUIUM

■ **SPEAKER**

Dr. Park, Hee Su (Quantum Technology Institute, Korea Research Institute of Standards and Science)

■ **TITLE**

Quantum Measurement and Information Processing Using Single Photons

■ **ABSTRACT**

This talk introduces the quantum optics activities in Korea Research Institute of Standards and Science (KRISS). As a foundation of single-photon technologies, measurement techniques for the non-classical nature of photons such as quantum entanglement are presented. Experimental setups to produce a small number of photons are applied to demonstration of an elementary quantum computing algorithm and a super-resolution interferometry. Strategies to scale up the photon-based quantum-enhanced or quantum-enabled technologies are discussed.

■ **DATE AND VENUE**

May 23, 2018 (Wednesday, 5:00 - 6:00 pm)
Seminar Room 116, KU R&D Center

■ **LANGUAGE**

Korean

■ **INVITED BY**

Dr. Lee, Sun Kyung