

# Joint CQSE and CASTS Seminar

2019  
Jun. 14, Friday

TIME Jun. 14, 2019, 14:30 ~ 15:30  
TITLE A Geometric Approach to Quantum Mechanics  
SPEAKER Dr. Chia-Yi Ju  
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PLACE Rm716, CCMS & New Physics Building, NTU

## Abstract

The theory of quantum is known to be self-consistent although some of the postulates might be too strong to make the theory complete. In the past two decades, many experiments have shown that their results might be better described by non-Hermitian dynamics which do not agree with the postulates of quantum mechanics (QM). However, the theory that generalizes Hermitian QM to non-Hermitian ones has not been settled yet. Many of the direct extensions lead to all kinds of paradoxes. In the talk, we will revisit the Schödinger equation and, from there, make a natural generalization of the Hermitian QM. The generalized theory is not only compatible with non-Hermitian Hamiltonians and has been proven to be free from the known of paradoxes.

