Joint CQSE and CASTS Seminar Feb. 26, 2021 (Friday)

• Time : 14:30~15:30

• Place : Rm833, New Physics Building

Speaker: Prof. Chuu Chih-Sung 褚志崧
Dept. of Physics, NTHU
國立清華大學物理學系

• Title : Applications of narrowband entangled photons in entanglement purification and photon-surface-plasmon coupling

▲ The seminar is also open to non-NTU members; hence all participents must wear a mask. (Following Fall and Winter Precautionary Measures)

**Sponsored by Center for Quantum Science and Engineering (CQSE) 量子科學與工程研究中心 and Center for Advanced Study in Theoretical Sciences (CASTS) 理論科學高等研究中心, NTU

Joint CQSE and CASTS Seminar

2021 February 26, Friday

 TIME Feb. 26, 2021, 2:30~3:30pm
TITLE Applications of narrowband entangled photons in entanglement purification and photon-surface-plasmon coupling
SPEAKER Prof. Chuu Chih-Sung Department of Physics, National Tsing Hua University
PLACE <u>Rm833</u>, CCMS & New Physics Building, NTU

<u>Abstract:</u>

Entangled photons lie at the heart of photonic quantum technologies, whose optimal performances are normally reached when the purity of entangled photons is high. However, the dissipation and decoherence always lead to the degradation of the entangled-photon quality. On the other hand, the interplay of nonclassical light and surface plasmons has attracted considerable attention due to fundamental interests and potential applications. To gain more insight into the quantum nature of the photon–surface-plasmon coupling, the time-resolved detection and manipulation of the interaction is necessary. In this talk, I will talk about our recent works on the entanglement purification and time-resolved detection of photon-surface-plasmon coupling using narrowband entangled photons.

Biography Brief:

Chih-Sung Chuu is currently an Associate Professor of physics at National Tsing Hua University and Center for Quantum Technologies, where he leads the Quantum Photonics Laboratory. His interests and expertise concern experimental quantum optics and quantum engineering, including the generation and applications of single and entangled photons, and the manipulation of the light–matter interaction at the single-photon level.



- N O T I C E -

▲ Please swipe NTU card / ID card when entering CCMS-Phys. Building.

▲ Both faculty members and participants are required to wear sanitary masks all the time.

▲ All participants and event workers should stay at designated areas and minimize contact at short distances.

▲We collect personal info during covid-19 only for contact tracing purposes.

