Joint CQSE & NCTS Seminar

2024
Sep. 6, Friday

Time: Sep. 6, 14:20 ~ 16:20
Title: Unveiling Quantum Wonders: Exploring Surreal Phenomena in a Box
Speaker: Dr. King Tai CHEUNG (Assistant CEO, SpinQHK)
Place: Rm. 104, Chin-Pao Yang Lecture Hall, Department of Physics/CCMS, NTU
Online Link:
https://nationaltaiwanuniversity-zbh.my.webex.com/nationaltaiwanuniversity-zbh.my/j.php?MTID=m7601bdfa496ccaf8aac2838aab8c25f2

Abstract:

We are in the age of Quantum 2.0—our technology has migrated from passively engineering systems with quantum effects to actively engineering and manipulating quantum states for our needs. In this talk, firstly, a brief overview of the major scope of quantum technology that we already have, as in quantum 1.0, which some of you may not have noticed, will be mentioned. This will be followed by the major quantum technologies that people are focusing on nowadays, such as quantum computing and quantum cryptography. In the second part, I will show you how students can learn about quantum phenomena and technology in a school setting or even at home by observing quantum physics in action, rather than just imagining it by reading figures or equations in textbooks or only using classical analogues of quantum effects. A picture is worth a thousand words, but a personal real-life experience is much more effective. Several quantum phenomena and technologies will be demonstrated.

Biography:

Dr CHEUNG, King Tai is the Quantum Computing Specialist and Assistant CEO of SPINQ TECHNOLOGY (HONGKONG) CO., LIMITED (abbreviated as SPINQHK). He is responsible for the development of quantum computing technologies, quantum-basedsoftware and devices, and quantum education.

Prior to joining SPINQHK, Dr CHEUNG subsequently held executive and technical positions in a few technology companies, being researcher and engineer in a few

universities and institution in Hong Kong, Shenzhen and Canada. Originally from Hong Kong, Dr CHEUNG has a research background that spans from Quantum 1.0 to Quantum 2.0: from quantum transport theory and algorithm for semiconductor and nanodevices, development of nano-optics characterization devices. He has previously worked as the quantum control engineer for quantum computer and scientific quantum software developer. Besides, he is also an educator who delivers lectures on quantum science and technology to students in Hong Kong.