

# NTU Q

## RELEVANT EVENTS

### NTU-IBM Quantum System User Conference & Qiskit Hackathon Taiwan 2024

Date: 19-21, Aug, 2024

Place: Taipei, Taiwan

Registration of the user conference is now open, and you don't want to miss out on this incredible opportunity to learn, network, and grow!



### 2024 High School Quantum Computing Summer Camp

Countries worldwide have invested significant resources in quantum computers, quantum communication, and quantum technologies in recent years. The main reason is that quantum properties can greatly enhance and change computational and communication models for specific problems. However, quantum computing vastly differs from traditional computing, and the confidentiality of quantum communication is incomparable to that of traditional communication. Quantum technologies also surpass the imagination of modern technology. This course primarily introduces the basic concepts of quantum computing, quantum communication, and quantum technologies, allowing more people to recognize the advent of the quantum era.

Date: 19-21, Aug, 2024. Join us at the High School Quantum Computing Summer Camp and be a part of the future of quantum technology!

## SELECTED NEWS

# Quantinuum Unveils Industry-First 56-Qubit Trapped-Ion Quantum Computer, Setting New Benchmark

Quantinuum has recently introduced the world's first quantum computer with 56 trapped-ion qubits, known as H2-1. This breakthrough not only surpasses existing industry benchmarks but also makes it impossible for classical computers to fully simulate. The joint effort between Quantinuum and JPMorgan Chase achieved an impressive 100x improvement over prior results, setting a new world record for the cross-entropy benchmark. H2-1's fidelity and scalability position it as a game-changer for various computational challenges across industries like finance, logistics, transportation, and chemistry<sup>2</sup>. These advancements are truly inspiring for the future of quantum computing! 🚀🔬

計畫補助單位



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