# NTU Q

SELECTED NEWS

ANNUAL MEETING AND QUANTUM FORUM OF TAQCIT

In this Christmas, Taiwan Association of quantum computation and information technology (TAQCIT) hold annual meeting and forum. In annual meeting, Dr. Cheng Chin, the professor of Chicago University, was invited to give us a keynote speech. He introduced how the fundamental physics can reshaping our perspective of science and technology.

Last year, the forum topic focus on quantum computer hardware. But in this year, the development and applications of the software are the focus of this forum. The major topics of the software applications are divided into three parts:
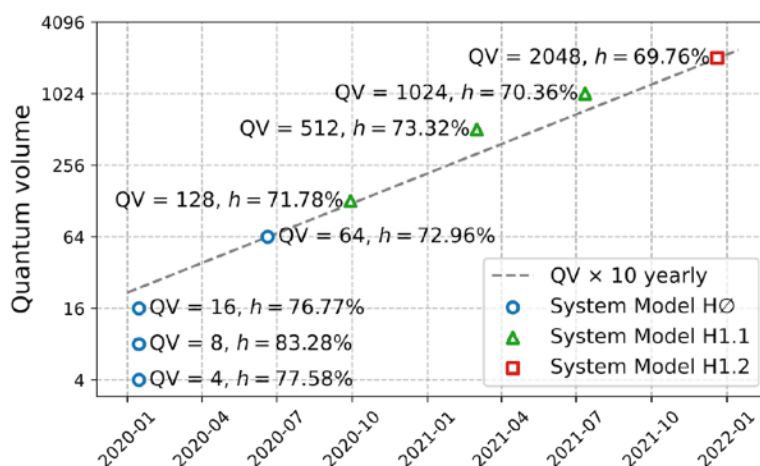
A. Quantum education: We invited educators in different fields, from high school teachers to professors of university. Speakers share their educational experience and notion about how to promote quantum education in school.

B. Quantum software application: The quantum technology is mature enough; therefore, the software devolvement is receiving more attention nowadays. The applications of quantum computing in the different industries, including machine learning, material, finance, chemistry and optimization are in a heated discussion

C. Quantum metaverse: Scientific fiction built our imagination about future life, and some of them has already become reality. In this section, novelist and director share their experience and talk about their creative ideas. In addition, the game creator express their idea about how to implement quantum theory in video games.
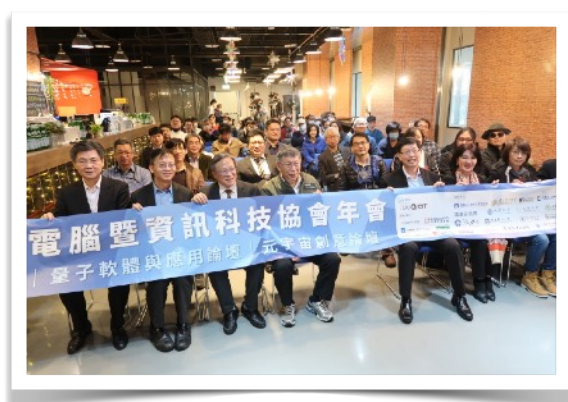
DEMONSTRATING BENEFITS OF QUANTUM UPGRADABLE DESIGN STRATEGY: SYSTEM MODEL H1-2 FIRST TO PROVE 2,048 QUANTUM VOLUME

Quantinuum (the merged quantum computing company bringing together Honeywell Quantum Solutions and Cambridge Quantum) announced their second H1 generation quantum computer H1-2 reached Quantum Volume of 2,048, setting a new bar on the highest quantum volume ever measured on other quantum computers.

The System Model H1-2 uses the same ion-trap architecture, control system design, integrated optics, and photonics as their previous version, H1-1. The group improved gate and measurement fidelities, reduced memory errors, faster circuit compilation, inclusion of real-time classical computing resources and quantum operations using 12 qubits, versus the 10 qubits available at initial release.

source: Quantinuum

READMORE