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| SELECTED NEWS

2020 Qiskit Hackathon Taiwan

NTU-IBM Q System 2020 Q-Camp has perfectly ended this month. This immersive experience consists of traninning sessions, deep technical talks, and a hackathon alongside the Qiskit core development team. Nearly 50 enthusiasts in Taiwan competed in this first Qiskit Hackathon held in Taiwan that spanned from September 8 to September 10. Winning team developed *Utilizing the Noise: Quantum Simulation of an open system*, successfully demonstrate the dissipation behaviors in an open quantum system. Sun, a member of the winning team said, "We learnt and exchanged experience with teammates during the hackathon. It is out honor to recieve the affirmation. We Hope that we can do more relevant research in the future."

Due to COVID-19, experts of IBM Tokyo joined the camp as mentors virtually during the whole three days. It is the first time to coach the participants online. We thanks for the support from MOST Taiwan and Hon Hai Industry. For more photos of the camp, please visit our twitter.

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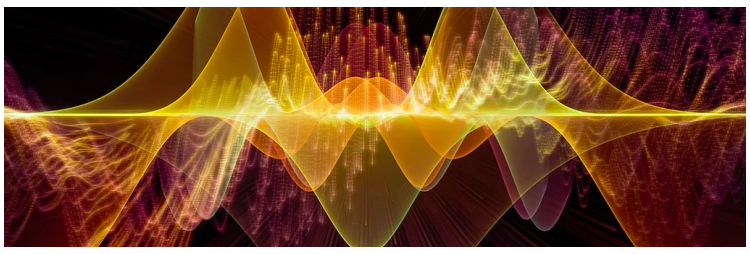
Taiwan Association of Quantum Computation and Information Technology

Quantum computing and information is a promising field after AI and 5G. Countries and international companies devote money and research power in order to take the cake in this competition. We can predict in a close future, quantum technology will become a fire worldwide. Taiwan Association of Quantum Computation and Information Technology (TAQCIT) has finally established this September after a six-month preparation. The TAQCIT is a non-profit academic social group. Its members cover not only academic experts but also industry leaders and influential people in society. We aim to promote quantum computation, quantum information and the associate technology, improve both software and hadware development as well as speedup the process of quantum computing in Taiwan. The First General Assembly was successfully held on September 12 and took place at Department of Physics, National Taiwan University.



Scientists Found a Way to Make States Last 10,000 Times Longer

"With this approach, we don't try to eliminate noise in the surroundings. Instead, we trick the system into thinking it doesn't experience the noise." said by Kevin Miao from the University of Chicago. The work is published on *Nature*.

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IBM's Quantum Roadmap Points Toward 1,000-Qubit Quantum Computer by 2023

"Our team is developing a suite of scalable, increasingly larger and better processors, with a 1,000-plus qubit device, called IBM Quantum Condor, targeted for the end of 2023. In order to house even more massive devices beyond Condor, we're developing a dilution refrigerator larger than any currently available commercially."

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| RELEVANT INTERESTING RESEARCH

- Stabilization and operation of a Kerr-cat qubit
- Efficient learning of quantum noise
- Universal coherence protection in a solid-state spin qubit
- Zero-bias peaks at zero magnetic field in ferromagnetic hybrid nanowires
- Demonstrating a continuous set of two-qubit gates for near-term quantum algorithms
- Demonstration of quantum volume 64 on a superconducting quantum computing system
- Fault-tolerant operation of a quantum error-correction code

| COMING EVENTS

The Wemon in Quantum Summit II | Sep. 29 - Oct. 03

The OneQuantum Women in Quantum Summit will bring together the leading Women in Quantum from around the world as they talk about their quantum journey in academia, government, investing and entrepreneurship. RSVP for free.

REGISTRATION

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