NTU Q

vol. 2
March 2020

| Continuing Education Program

NTU - IBM Q Hub Quantum Computing Continuing Education

IBM Quantum Computer Hub at National Taiwan University

National Taiwan University lanuched the "IBM Q Hub at NTU" and became a member of IBM Quantum Hub in January, 2019. To broaden the knowledge of quantum computing as well as the fundamentals of quantum mechanics and IBM Quantum System, we have held the relevant continuing educating courses in NSYSU, NCHU, NTNU and NTUST. The courses cover from the brief introduction to quantum information, quantum computing, to demonstration of conducting a program of quantum gates. If you are interested in the field of quantum compuing or join "NTU-IBM Q System", please feel free to contact us.

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NTU-IBM Q量子電腦大學推廣教育課程

臺灣大學-IBM量子電腦中心

量子電腦的發明讓許多過去無法以傳統電腦處理的問題有了新視界！在IBM公司推出史上第一部商用量子電腦後，量子計算已不侷限於專業研究員。2019年「臺灣大學-IBM量子電腦中心」正式成立、成為IBM量子電腦中心成員之一，推廣基礎量子電腦及量子計算不遺餘力。截至目前本中心已於全臺多所大專院校舉辦「NTU-IBM Q量子電腦推廣教育課程」，內容涵蓋量子電腦與量子計算淺談、量子程式語言編寫等初級實作。歡迎國內對量子電腦或計算有興趣之各大專院校提出開課申請，我們將安排講師前往授課，亦鼓勵各界研究人員與師生加入「臺灣大學IBM Q System」，走入全新量子計算模式。

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| SELECTED NEWS

IBM Invests in Cambridge Quantum Computing

Cambridge Quantum Computing (CQC) announced that IBM has become a strategic investor in the company on February. The investment comes from after years of collaborations between CQC and IBM's quantum computing team. CQC is a leading quantum computing software company with scientists in Cambridge (UK), San Francisco, London and Tokyo.

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India invests US$ 1.12 bilion for quantum research

The funding would be 5-year period and help India bridge gap in quantum computing with US and China.

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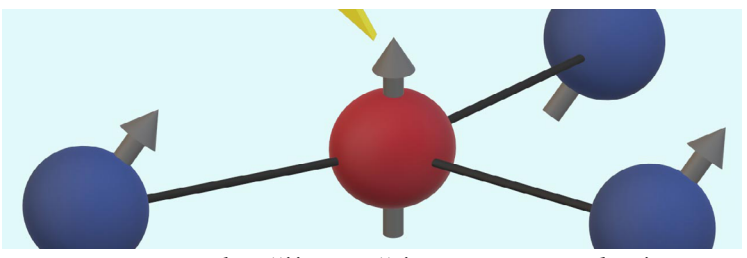

MIT corrects the "jitters" in quantum devices

MIT suggests a more efficient path to error correction, helping make quantum computers more practical. For more detail, please visit the below relevant research.

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White House bolsters quantum information science funding by more than 50%

White House issued a Strategic Vision for America's Quantum Networks, providing the QIS research community with specific recommendations to focus quantum internet R&D activities.

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| RELEVANT INTERESTING RESEARCH

- Driving quantum correlated atom-pairs from a Bose-Einstein condensate
- Self-organized synchronization of phonon lasers
- Observation of a quantum phase from classical rotation of a single spin
- Efficient quantum error correction of dephasing induced by a common fluctuator
- Phase protection of Fano-Feshbach resonances

| COMING EVENTS

NTU-IBM Q Quantum Computer Navigation |National Taiwan University, Taiwan

In cooperation to Ministry of Science and Technology, R.O.C. (MOST), IBM Q Hub at NTU will hold a promotion course "NTU-IBM Q Quantum Computer Navigation" on May 16, 2020. This education event is designed for high schools students and above. In guide tour, we will introduce the fundamentals of quantum computers, and offer a opportunity of interaction between researchers and attendees. In addition, we will teach the audience to build their own quantum circuits from zero to one through graphical platform, and run the experiments via simulator or real device. The participants will also learn how to control the quantum computer released by IBM Company with quantum computing package "Qiskit". If you are interested in this Open House event, please don't hesitate to registrate.

NTU-IBM Q量子電腦導航 | 國立臺灣大學（臺灣）

《復仇者聯盟四》中英雄們進入所謂的「量子領域」，進而回到過去扭轉結局、成功拯救世界。科學上的「量子力學」或許無法如電影般回到過去、無所不能，然許多的量子現象仍相當特殊，「量子電腦」正是利用量子規則來製作的全新計算模式。美國IBM Q Network Hub釋出5個免費「量子位元（Qubits）」，讓所有人能嘗試擁抱這種全新計算模式。臺灣大學-IBM量子電腦中心將於5月16日舉辦IBM Q線上系統操作課程，帶領大家一探全新計算模式——量子電腦。活動包含介紹基本量子電腦原理的定時導覽與操作課程，實作課程將利用視覺化平台從無到有打造量子電路、並上傳模擬器或雲端真實裝置進行實驗，使用Qiskit套件與遠端控制電子電腦處理器。本課程適合希望瞭解此前沿技術的新手和已有一點使用經驗、想更深入學習者，高中以上民眾皆可報名。即日起，「NTU-IBM Q 量子電腦導航」等您上線！詳情請見科技部網站。

IBM Q Hub at NTU x CMU Forum |National Taiwan University, Taiwan

The symposium is organized by NTU-IBM Quantum Computer Hub at National Taiwan University. It aims to bring together experts to exchange knowledge in the fields of quantum computing, artificial intelligence, economics, and econometrics. It also provides an opportunity for the attendees to share their experience of using IBM Q system. We are confident that this forum will be a confident step to broaden the community of both quantum computing and economics. The joint forum will be postponed to June due to the Wuhan Conronavirus epidemic.

QD 2020 |Munich, Germany

11th International Conference on Quantum Dots is open for registration until April 24th. The conference brings the world's leading quantum dot researchers in experiment and theory.

REGISTRATION

Topology and Correlations: Long-Range Entanglement in Many-Body System |South Hadley, U.S.A.

The major theme is to understand how the confluence of strong interactions, topology and symmetry lead to new state of matter.

REGISTRATION

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