AI for Science Thematic Workshop on Hybrid Quantum Computing

A collaborative workshop for researchers to brainstorm and define the potential transformative ability of AI with and for Hybrid Quantum Computing

16 May 2024 | 12.30pm-5.30pm

Pinnacle Room, Level 16 CREATE Tower

Registration:
https://go.gov.sg/hqcworkshop

1230 – 1315	Registration, Lunch
1315 - 1330	Opening Remarks by the *AI for Science* team, Profs. Yang Zhang and Kedar Hippalgaonkar, and by Assoc. Prof. Dario Poletti
1330 - 1500	Short talks by domain experts on challenges and opportunities: 1. Prof. Jose' Ignacio Latorre (CQT and NUS), Challenges for hybrid classical-quantum computing 2. Prof. Kwek Leong Chuan (CQT and NIE), Photonic Computing and Neural Networks 3. Dr. Ye Jun (IHPC A*STAR), A System Perspective on Hybrid Quantum Computing: Hybrid Algorithms, Software, and Middleware 4. Dr. Manas Mukherjee (CQT and IMRE A*STAR), An ion trap implementation of quantum-classical hybrid machine learning algorithm 5. Dr. Pan Feng (CQT), Generative Models and Quantum Circuits 6. Dr. Joe Fitzsimons (Horizon Quantum Computing), TBA
1500 – 1530	Tea / Coffee Break
1530 – 1600	Breakout discussions: Challenges and Perspectives in Hybrid Quantum Computing which can be assisted with AI or can help AI
1600 – 1630	Sharing by breakout groups
1630 - 1700	Executive summary led by Assoc. Prof. Dario Poletti
1700 - 1730	Tea / Coffee Break

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