

EQUATE Seminar Series

ROB BUCKLEY

Progress in Superconducting Quantum Computing at Google



ABSTRACT

The rapidly growing field of quantum computing has the promise to enable new types of compute power beyond what is achievable with large-scale classical compute, for certain classes of problems. This talk will overview Google Quantum AI's progress towards the development of increasingly-complex quantum computers: demonstrating beyond-classical performance, achievements within noisy intermediate scale quantum (NISQ) algorithms, and progress towards scalable quantum error correction, the holy grail of quantum computing.

BIO

Bob Buckley graduated from University of Nebraska - Lincoln with degrees in Engineering Physics & Mechanical Engineering, performing undergraduate research under Physics Professor Roger D. Kirby. He then went on to the University of California - Santa Barbara where he received a PhD in Physics under Professor David Awschalom, studying quantum phenomena in semiconductor spins with optical techniques. After a few years of farming in rural Nebraska, Bob joined Freedom Photonics, a small company specializing in emerging technologies in the photonics field. Bob is now at Google Quantum AI developing hardware for next-generation quantum computers.

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