



HARVARD UNIVERSITY
17 Oxford Street
Cambridge, MA 02138

Mathematical Picture Language Seminar



Tuesday, December 12

9:30 a.m. Boston time

Jefferson 453

Ryan Babbush

Google Research

The search for valuable applications of fault-tolerant quantum computers

Abstract: The ultimate dream of quantum computing, and the plan of record for many industrial efforts, is to build a fault-tolerant quantum computer. This talk will survey work of Google's Quantum Algorithms & Applications team which seeks to answer this question by developing, compiling, and benchmarking the most promising applications of quantum computers that realize a super-quadratic speedup over classical methods. The talk will touch on applications in quantum chemistry, classical differential equations, optimization and machine learning.



Zoom QR Code & Link:

<https://harvard.zoom.us/j/779283357?pwd=MitXVm1pYUIJVzZqT3lwV2pCT1ZUQT09>

<https://mathpicture.fas.harvard.edu/seminar>