

HARVARD UNIVERSITY
17 Oxford Street
Cambridge, MA 02138



Tuesday, February 23, 2021, at 9:30 (Boston)
14:30 (UK/Eire) 15:30 (C.Europe) 22:30 (China)

!NOTE EARLIER TIME!

Mathematical Picture Language Seminar

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

From multi-photon entanglement to quantum computational advantage
Jian-Wei Pan, University of Science and Technology of China

Abstract: By developing high-performance quantum light sources, the multi-photon interference has been scaled up to implement Boson sampling with up to 76 photons out of a 100-mode interferometer, which yields a Hilbert state space dimension of 10^{30} and a rate that is 10^{14} faster than using the state-of-the-art simulation strategy on supercomputers. Such a demonstration of quantum computational advantage is a much-anticipated milestone for quantum computing.

