

HARVARD UNIVERSITY
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Tuesday, June 30, 2020, at 10:00 (Boston)
15:00 (UK/Eire) 16:00 (C.Europe) 22:00 (China)

Mathematical Picture Language Seminar
Zoom at: <https://harvard.zoom.us/j/779283357>

**A hidden variable model for universal quantum
computation with magic states on qubits**
Robert Raussendorf, University of British Columbia

Abstract: We show that every quantum computation can be described by Bayesian update of a probability distribution on a finite state space. Negativity in a quasiprobability function is not required, neither in states nor the operations. Our result is consistent with Gleason's Theorem and the PBR theorem. This is joint work with Michael Zurek and Cihan Okay; see [arXiv:2004.01992](https://arxiv.org/abs/2004.01992).

