Abstract Submitted
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Efficient Bayesian Phase Estimation NATHAN WIEBE, Microsoft Research, CHRISTOPHER GRANADE, University of Sydney — We provide a new efficient adaptive algorithm for performing phase estimation that does not require that the user infer the bits of the eigenphase in reverse order; rather it directly infers the phase and estimates the uncertainty in the phase directly from experimental data. Our method is highly flexible, recovers from failures, and can be run in the presence of substantial decoherence and other experimental imperfections and is as fast or faster than existing algorithms.

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