Modelling Pauli measurements on arbitrary stabilizer states via local hidden variables assisted by classical communication MATTHEW ELLIOTT, BRYAN EASTIN, CARLTON CAVES, University of New Mexico, JONATHAN BARRETT, Perimeter Institute, STEFANO PIRONIO, California Institute of Technology — In this talk I present communication-assisted local-hidden-variable models for measurements of products of Pauli matrices on stabilizer states. Models are analyzed with respect to restrictions imposed and their efficacy in predicting overall measurement outcomes as well as outcomes of correlated subsets of measurements. In particular, I present a model in which the quantum mechanical results of Pauli product measurements can be predicted by a local-hidden-variable table supplemented by an efficient amount of classical communication and computation.

Matthew Elliott
University of New Mexico