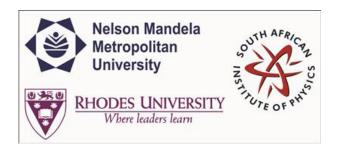
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Contribution ID: 265 Type: Oral Presentation

Process tomography within the hybrid formalism

Wednesday, 1 July 2015 14:20 (20 minutes)

Abstract content
 (Max 300 words)
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We consider the problem of tracking the evolution of a single quantum system when the dynamics are not precisely known, via a sequential measurement protocol. We encode the limited knowledge of the dynamical parameters in a classical system which is coupled to an estimate of

the quantum state in order to form a hybrid quantum-classical system. The estimated hybrid state is updated using information obtained from sequential measurements on the quantum system and after a sufficient waiting period, the dynamical parameter can be determined. Convergence of the estimated hybrid state to the true state is demonstrated using numerical simulations.

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