Abstract Submitted for the MAR06 Meeting of The American Physical Society

Dynamics and scaling of multi-partite entanglement FLORIAN MINTERT, Harvard University — We derive reliable estimates which allow for an efficient evaluation of a specific entanglement measure, concurrence, for further implementation in the monitoring of the time evolution of multipartite entanglement under incoherent environment coupling. This allows us to define a life time of entanglement for different realistic experimental scenarios, and investigate its scaling behaviour with increasing system size.

Florian Mintert Harvard University

Date submitted: 25 Nov 2005 Electronic form version 1.4