

Report: QUIPROCONE funding application 013

Prof. Kümmerer visited our group in July 2001 for three days. He presented talks on “Quantum State Preparation via Asymptotic Completeness” and “An Ergodic Theorem for Quantum Counting Processes”.

The visit allowed for long and stimulating discussions on a variety of topics and has set the stage for a continued exchange and collaboration on the mathematics of quantum information. In particular we discussed questions of entanglement and distillability in two- and multi-party systems. Specifically, we explored how to extend the notions of positivity and complete positivity to *non-linear* maps. Such maps are indicated to be useful both in the context of entanglement transformations and of separability criteria.