We compare this with the resulting state after sending it through the best Nash bilinear approximation to that noisy channel!

Trace distance between the initial and final states after the ADC and its best PC and PMC approximations as a function of the damping strength, $\gamma$, when the initial state is (a) $|1\rangle$ and (b) $|+\rangle$. In both cases, the logical states are encoded using the Steane $(7,1,3)$ code.

References


Other presentations at SQuaT 2013:

56. Quantum Circuit Fault Tolerant: an efficient tool to calculate logical failure rates of concatenated FTQEC circuits
57. Stability of Ion Chains in a Cryogenic Surface-Electrode Ion Trap

Brown Lab

The Brown Lab is always looking for graduate students and postdoctoral candidates from all disciplines: http://www2.chemistry.gatech.edu/brownlab/