## Abstract Submitted for the MAR13 Meeting of The American Physical Society

Reduction of Cavity loss and Spontaneous Emission in Cavity QED WAYNE MANRAKHAN, Delaware State University — An investigation of the entanglement dynamics of two atoms with a quantized cavity field in the presence of dissipation is undertaken. A study of the effects of spontaneous emission and cavity loss in our scheme shows how to reduce the effects of each independently in a bimodal cavity. Our computer numerical simulation results indicate that by choosing proper parameters one can reduce the effects of spontaneous emission and cavity loss.

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Date submitted: 28 Nov 2012 Electronic form version 1.4