

Title:

**NUMERICAL RESULTS FOR THE METROPOLIS ALGORITHM**

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Technical Report number (Dept. of Statistics, Stanford Univ.):

**2003-6**

Date:

**March, 2003**

Abstract:

We analyze what may be the simplest example of the Metropolis Algorithm on a continuous state space. Even here, the spectral analysis is fascinating. There is both discrete and continuous spectra and the eigen-vectors are unusual. The present study is numerical and shows how continuous spectra emerges in numerical approximation.