1128-05-244 Mark Kempton\* (mkempton@cmsa.fas.harvard.edu). Non-backtracking random walks and graph clustering. Preliminary report.

Recently, operators related to non-backtracking random walks on graphs have been used to give improved spectral algorithms for graph clustering. These operators have interesting spectra that relate to the mixing of non-backtracking random walks. I will discuss spectral properties of non-backtracking random walks, and related results. (Received February 27, 2017)