1046-Z1-184   **Peter T Olszewski*** (`polszewski06@yahoo.com`), 18 Sheephill Road, Riverside, CT 06878.
Group Presentations, Cayley Graphs, & Markov Processes. Preliminary report.

The purpose of this talk is to examine the relationship between groups, group presentations, their Cayley graphs, and associated Markov Processes. In particular, we prove that for a finite group derived from an ergodic Markov Process, a process we describe in this talk, the long-range equilibrium vector is uniform on the group elements, as to be expected. We also prove a theorem giving a complete characterization of finitely generated free groups in terms of their associated Markov Processes. (Received August 13, 2008)