

Meeting: 1003, Atlanta, Georgia, SS 10A, AMS Special Session on Dynamics of Mapping Class Groups on Moduli Spaces, I

1003-37-1722 **Moon Duchin*** (mduchin@math.uchicago.edu). *An Ergodic Theorem for Random Walks on the Mapping Class Group*.

We show that almost all random walk trajectories on the mapping class group are well-approximable by Teichmüller geodesic rays. This adapts a similar result of Karlsson and Margulis (1999) – a version of the Oseledec multiplicative ergodic theorem – which they proved for Busemann nonpositively curved spaces. In place of this curvature condition (which fails for Teichmüller space), we prove a new comparison-triangle result for the Teichmüller metric. (Received October 18, 2004)