1135-VC-1723 **Kevin Gerstle*** (kgerstle@oberlin.edu) and **Miranda Schaum**. *Studying Harmonic Measure through Brownian Motion Simulation and Teleportation.* Preliminary report.

Harmonic measure distribution functions describe the harmonic measure of portions of the boundaries of two-dimensional domains and give information about the geometry of these domains. Such functions can equivalently be defined by the probability a Brownian particle starting inside the domain will first hit the boundary of the domain within distance r from its starting point. In this talk, we will describe the process for simulating this two-dimensional Brownian motion and will discuss how "teleportation" of Brownian particles may be used to expedite these simulations by taking large random steps rather than small ones. This talk is based on joint work with M. Schaum. (Received September 24, 2017)