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M. A. Snipes* (snipesm@kenyon.edu). *Calculating harmonic measure in doubly connected domains.*

Harmonic measure is a natural measure on the boundary of a planar domain that reflects the accessibility of a portion of the domain by a Brownian particle released from some basepoint in the domain. Harmonic measure is invariant under conformal maps, so for simply connected domains, one can use the Riemann map to calculate the harmonic measure of subsets of the boundary. For multiply-connected domains, the problem becomes more complex. In this talk, we will describe (and compare) several approaches to calculating harmonic measure for doubly-connected domains, focusing on the example of the doubly-slit plane. This is joint work with J. Aarao, B.L. Walden, and L.A. Ward. (Received August 29, 2016)