

WICHITA STATE UNIVERSITY

Department of Mathematics, Statistics & Physics

Visiting Candidate for Assistant Professor Position

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“Aspects of potential theory in the plane,
on the sphere, and on the torus”

Abstract:

Consider releasing a Brownian particle from a basepoint z_0 in a planar domain C . What is the chance, denoted $h_{z_0}(r)$, that the particle's first exit from C occurs within a fixed distance $r > 0$ of z_0 ? The function $h_{z_0}: [0, \infty) \rightarrow [0, 1]$ is