

MARTIN BOUNDARY FOR SUBORDINATE BROWNIAN MOTION

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In this talk I will give a survey of some recent results on the Martin boundary of both bounded and unbounded sets with respect to a rather wide class of subordinate Brownian motions. The main tool in studying the Martin boundary is the boundary Harnack principle for nonnegative harmonic functions. I will describe a uniform version of this principle for the finite part of the boundary and infinity. Building upon these results, one can identify the finite part of the Martin boundary of the so called κ -fat set with the Euclidean boundary, and the infinite part by a single point. Finally, I will also discuss minimal thinness for subordinate Brownian motion in half-space.