1054-60-118 Mike O'Neill* (moneill@cmc.edu), Department of Mathematics, Claremont McKenna College, Claremont, CA 91711. Stochastic methods and boundary behavior of harmonic functions.
We will discuss some ideas from a stochastic proof of the McMillan twist point theorem on simply connected domains in the plane and explain how they lead to a generalization to non-tangentially accessible domains in two or more dimensions. The same techniques lead to a Fatou type convergence theorem along hyperbolic geodesics in nontangentially accessible domains. Extensions to uniform domains will be discussed if time permits. (Received September 09, 2009)