SUBORDINATE RANDOM WALKS AND HARNACK INEQUALITY

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In this talk, we introduce a notion of discrete subordination and we consider a large class of subordinate random walks on the d-dimensional integer lattice via subordinators with Laplace exponents which are complete Bernstein functions satisfying certain scaling conditions at zero. We establish estimates for onestep transition probabilities, the Green function and the Green function of a ball, and prove the Harnack inequality for non-negative harmonic functions.