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Sergey Denisov* (denissov@math.wisc.edu), UW-Madison, Mathematics Department, 480 Lincoln Drive, Madison, WI 53706. *The probability measure on the paths and multidimensional scattering.*

We focus on the scattering problem for multidimensional Schrodinger operator and study the minimal conditions on "decay" of potential that lead to wave propagation. Certain sufficient conditions can be given through probability measure on the paths going to infinity. That measure is defined via simple Ito's differential equation. From the analytical perspective, this necessitates the study of special Potential Theory and introduction of modified Harmonic Measure. This is an ongoing project with S. Kupin (Received January 23, 2010)