

ESTIMATES OF THE TRANSITION DENSITIES FOR THE REFLECTED
BROWNIAN MOTION ON SIMPLE NESTED FRACTALS

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Abstract: We give sharp two-sided estimates for the functions $g_M(t, x, y)$ and $g(t, x, y) - g_M(t, x, y)$, where $g_M(t, x, y)$ are the transition probability densities of the reflected Brownian motion on an M -complex of order $M \in \mathbb{Z}$ of an unbounded planar simple nested fractal and $g(t, x, y)$ are the transition probability densities of the “free” Brownian motion on this fractal. This is done for a large class of planar simple nested fractals with the good labeling property.

2000 AMS Mathematics Subject Classification: Primary: 60J35, 28A80; Secondary: 60J25, 60J65.

Keywords and phrases: Projection, good labeling property, reflected process, transition probability density, simple nested fractal, graph metric, Sierpiński gasket.

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