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ON THE DISTRIBUTION AND q-VARIATION OF THE SOLUTION TO THE HEAT EQUATION WITH FRACTIONAL LAPLACIAN

Z. Mahdi Khalil
C. A. Tudor

Abstract: We study the probability distribution of the solution to the linear stochastic heat equation with fractional Laplacian and white noise in time and white or correlated noise in space. As an application, we deduce the behavior of the q-variations of the solution in time and in space.

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