

On a theorem in multi-parameter potential theory

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Abstract

We prove that the expected Lebesgue measure of the range of an additive Lévy process is positive if and only if the product $\text{Re}([1+\Psi_1(x)]^{-1})\dots\text{Re}([1+\Psi_N(x)]^{-1})$ is integrable. This was previously proved by Khoshnevisan, Xiao and Zhong [1] under a sector condition.

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