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THE AREA OF A SPECTRALLY POSITIVE STABLE PROCESS STOPPED AT ZERO

Julien Letemplier Thomas Simon

Abstract: A multiplicative identity in law for the area of a spectrally positive Lévy α -stable process stopped at zero is established. Extending that of Lefebvre for Brownian motion, it involves an inverse beta random variable and the square of a positive stable random variable. This simple identity makes it possible to study precisely the behaviour of the density at zero, which is Fréchet-like.

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