

SELFDECOMPOSABLE LAWS ASSOCIATED WITH HYPERBOLIC
FUNCTIONS

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Abstract: It is shown that the hyperbolic functions can be associated with self-decomposable distributions (in short: SD probability distributions or Lévy class L of probability laws). Consequently, they admit associated background driving Lévy processes Y (BDLP's Y). We interpret the distributions of $Y(1)$ via Bessel squared processes, Bessel bridges and local times.

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Key words and phrases: Hyperbolic characteristic functions, class L or SD probability distributions, selfdecomposability, Lévy process, Bessel squared process, Bessel bridge, local times.

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