

# On decomposable distributions with discrete residue\*

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## Abstract

We consider two classes of decomposable distributions to model a point process of random events on the time axis with high occurrence of clusters. In the model, continuously distributed random waiting times may coincide with positive probability. The first class consists of Loève's semi-selfdecomposable distributions with regularly varying Laplace transforms. Geometric-compounded and related distributions form the second class.

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\**Received:* October 23, 2007; *Accepted:* December 21, 2007.

*Key words and phrases:* selfdecomposable, semi-selfdecomposable, geometric-compound, Laplace transform, decomposability semigroup, waiting time, survival function, renewal process.

*AMS 2000 subject classifications.* Primary 60E10, 60E07; secondary 44A10, 62N05, 62H10, 90B15.

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