

## Rare Event Simulation for a Generalized Hawkes Process

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- [ZhangBlanchetGieseckeG09.pdf](#)

In this paper we study rare event simulation for the tail probability of an affine point process  $(J_t)_{t \geq 0}$  that generalizes the Hawkes process. By constructing a suitable exponential martingale, we are able to construct an importance sampling algorithm that is logarithmically efficient in the Gartner-Ellis asymptotic regime.

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