



# On a Rapid Simulation of the Dirichlet Process

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We describe a simple and efficient procedure for approximating the Levy measure of a  $\text{Gamma}(\alpha, 1)$  random variable. We use this approximation to derive a finite sum-representation that converges almost surely to Ferguson's representation of the Dirichlet process based on arrivals of a homogeneous Poisson process. We compare the efficiency of our approximation to several other well known approximations of the Dirichlet process and demonstrate a substantial improvement.

Comments: Copy right regulations. The paper has been accepted

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