

Estimation of Parameters of Generalized Geometric Linnik Distribution

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Abstract: Consider the geometric Linnik distribution $GL(\alpha, \lambda)$ with characteristic function

$$\phi(t) = \frac{1}{1 + \ln(1 + \lambda |t|^\alpha)}, \lambda > 0, 0 < \alpha \leq 2. \text{ and type II Generalized Geometric Linnik distribution}$$

$$GeGL_2(\alpha, \lambda, \nu) \text{ with characteristic function } \phi(t) = \left[\frac{1}{1 + \ln(1 + \lambda |t|^\alpha)} \right]^\nu, 0 < \alpha \leq 2, \lambda > 0,$$

$\nu > 0$. [9] used empirical characteristic function to estimate the parameters of a stable law. [1] used characteristic function technique to estimate the parameters of geometric stable law (see also, [2]). Here we estimate the parameters of geometric Linnik distribution and Generalized Geometric Linnik distribution using empirical characteristic function.

Keywords: Geometric Linnik Distribution, Generalized Geometric Linnik Distribution

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