

Cline, Daren B. H.**Convolutions of distributions with exponential and subexponential tails.** (English)

Zbl 0633.60021

J. Aust. Math. Soc., Ser. A 43, 347-365 (1987).

The author introduces a technique which allows him to obtain a number of technical results about distribution tails with a minimum of analysis. Principal among these is a real analytic proof of a theorem of J. Chover, S. Wainger and P. Ney which runs as follows:

If F is a nonnegative finite measure on \mathbb{R} , and if the tail function $\bar{F}(t) = F(t, \infty)$ satisfies $\bar{F}(t - u) \sim e^{au} \bar{F}(t)$ for all $u \in \mathbb{R}$ and also $\bar{F}^* \bar{F}(t) \sim 2d\bar{F}(t)$, then necessarily $d = \int e^{au} F(du)$.

Reviewer: B.Horkelheimer

MSC:

60E05 Probability distributions: general theory

Cited in **2** Reviews
Cited in **73** Documents**Keywords:**

convolution tails; exponential tails; subexponential tails; distribution tails