

Klebaner, F. C.

Geometric rate of growth in population-size-dependent branching processes. (English)

Zbl 0544.60073

J. Appl. Probab. 21, 40-49 (1984).

"We consider a branching process model $\{Z_n\}$, where the law of offspring distribution depends on the population size. We consider the case when the means m_n (m_n is the mean of offspring distribution when the population size is equal to n) tend to a limit $m > 1$ as $n \rightarrow \infty$. For a certain class of processes $\{Z_n\}$ necessary conditions for convergence in L^1 and L^2 and sufficient conditions for almost sure convergence and convergence in L^2 of $W_n = Z_n/m^n$ are given". (Author's summary)

This paper appears to be a postscript to a more substantial one by the same author, Adv. Appl. Probab. 16, 30-55 (1984; Zbl 0528.60080).

Reviewer: [D.R.Grey](#)

MSC:

[60J80](#) Branching processes (Galton-Watson, birth-and-death, etc.)

[60F15](#) Strong limit theorems

[60F25](#) L^p -limit theorems

Cited in **5** Reviews
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Keywords:

[branching process model](#); [conditions for convergence](#)

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