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Asymptotic Gaussianity of some estimators for reduced factorial moment measures and product densities of stationary Poisson cluster processes. (English) [Zbl 0666.62032](#)
Statistics 19, No. 1, 87-106 (1988).

The asymptotic normality of a class of estimators related to reduced factorial moment measures is established, using the central limit theorem in which the moment conditions are reduced to a minimum. The weak convergence theorem is also provided in the case of a stationary simple Poisson cluster process (pcp) and is applied to the investigation of the asymptotic behaviour of the empirical second-order moment function. Further, the asymptotic properties of kernel-type estimators for second-order product densities of pcp's are discussed.

Reviewer: [M.Akahira](#)

MSC:

[62F12](#) Asymptotic properties of parametric estimators
[60F05](#) Central limit and other weak theorems
[60F17](#) Functional limit theorems; invariance principles
[60G55](#) Point processes (e.g., Poisson, Cox, Hawkes processes)

Cited in **25** Documents

Keywords:

asymptotic normality; reduced factorial moment measures; central limit theorem; moment conditions; weak convergence theorem; stationary simple Poisson cluster process; asymptotic behaviour of the empirical second-order moment function; asymptotic properties of kernel-type estimators; second-order product densities

Software:

spatial

Full Text: [DOI](#)

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