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A class of U -statistics and asymptotic normality of the number of k - clusters. (English)

Zbl 0764.60025

J. Multivariate Anal. 43, No. 2, 300-330 (1992).

The authors prove a central limit theorem for a class of U -statistics whose kernel depends on the sample size and for which the projection method may fail. As an application they derive the asymptotic normality of the number of Poisson K -clusters in a cube of increasing size in R^d . In this process they also extend earlier results of *S. R. Jammalamadaka* and *S. Janson* [*Ann. Probab.* 14, 1347-1358 (1986; Zbl 0604.60023)] to general kernels and to general orders $K > 2$ of the kernel.

Reviewer: [A.K.Basu \(Calcutta\)](#)

MSC:

60F05 Central limit and other weak theorems
62E20 Asymptotic distribution theory in statistics

Cited in **1** Review
Cited in **8** Documents

Keywords:

central limit theorem; U -statistics; asymptotic normality

Full Text: [DOI](#)

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