

Shashkin, A. P.

Quasi-associatedness of a Gaussian system of random vectors. (English. Russian original)

Zbl 1218.62059

Russ. Math. Surv. 57, No. 6, 1243-1244 (2002); translation from Usp. Mat. Nauk 57, No. 6, 199-200 (2002).

From the paper: *L.D. Pitt* [Ann. Probab. 10, 496–499 (1982; Zbl 0482.62046)] proved that a Gaussian system $\{\xi_t, t \in T\}$ of real random variables is associated if and only if the covariances $\text{cov}(\xi_s, \xi_t)$ are non-negative for all $s, t \in T$. According to *K. Joag-Deo* and *F. Proschan* [Ann. Stat. 11, 286–295 (1983; Zbl 0508.62041)] negative associatedness of a Gaussian system is equivalent to the condition that $\text{cov}(\xi_s, \xi_t) \leq 0$ for $s \neq t$. The goal of this note is to prove that Gaussian systems of random vectors $\{\xi_t, t \in T\}$ with values in \mathbb{R}^s are quasi-associated.

MSC:

62H20 Measures of association (correlation, canonical correlation, etc.)

62H05 Characterization and structure theory for multivariate probability distributions; copulas

Cited in 2 Documents

Full Text: [DOI](#)