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Archimedean copulae and positive dependence. (English) Zbl 1065.60018
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Summary: We consider different issues related to Archimedean copulae and positive dependence. In the first part, we characterize Archimedean copulae that possess positive dependence properties such as multivariate total positivity of order 2 (MTP_2) and conditionally increasingness in sequence. In the second part, we investigate conditions for exchangeable binary sequences to admit an Archimedean copula, and we show that they depend on the extendibility of the sequence, and therefore on its positive-dependence properties.

MSC:

60E15 Inequalities; stochastic orderings
62G09 Nonparametric statistical resampling methods
62H10 Multivariate distribution of statistics
62H20 Measures of association (correlation, canonical correlation, etc.)

Cited in 44 Documents

Keywords:

Conditionally increasing; MTP_2 ; Positive lower orthant dependent; Exchangeability; Binary sequences

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