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A new family of copulas based on distortion function and its properties

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Abstract

One of the basic methods of constructing the copula function is to use the bivariate survival function. In this article, using the copula function and taking into properties of distortion functions, a family of distribution functions is introduced and its characteristics are investigated. In the following, using the introduced distribution function, a bivariate survival function is presented and based on it, a family of copula functions is introduced.

Keywords: Copula function , Distortion function, Dependence structure, Dependence measures.

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