Gastvortrag

Mittwoch, 26. September 2018
15.00 Uhr
Seminarraum II

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Cone distribution functions and quantiles for multivariate random variables

Abstract:

Set-valued quantiles for multivariate distributions with respect to a general convex cone are introduced which are based on a family of (univariate) distribution functions rather than on the joint distribution function. It is shown that these quantiles enjoy basically all the properties of univariate quantile functions. Relationships to families of univariate quantile functions and to depth functions are discussed. Finally, a corresponding Value-at-Risk for multivariate random variables as well as a stochastic (dominance) order based on quantiles are introduced via the set-valued approach.

Eingeladen von: Wolfgang Trutschnig