

APPLICATIONS OF THE REARRANGEMENT ALGORITHM

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Puccetti and Rüschendorf (2012) introduce the rearrangement algorithm (RA) to approximate risk bounds for a random vector (X_1, \dots, X_d) for which the marginal distributions of the components are known but their dependence is unknown. In this talk we discuss properties, extensions and applications of the RA in risk management, operations research and finance. In particular we show that RA can be used for inferring a dependence among asset returns based on the sole use of option data (forward looking approach).

This talk is based on joint work with Carole Bernard, Oleg Bondarenko and Ludger Rüschendorf.