

## SALZBURG MATHEMATICS COLLOQUIUM

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"Copulas for discrete data"

January 26, 2017

## Abstract:

According to Sklar's Theorem, the probability law of any random vector can be expressed as a composition of the distribution functions of all its components and a suitable copula. However, while the copula associated with a random vector is unique when all marginal distributions are continuous, in the non-continuous case, various copulas can be associated with the same random vector, all being coincident in a subset of the copula domain.

In this presentation we discuss how it is possible to construct a copula given some partial information about the values that it assumes. To this end, we analyze the structure of the class of so-called sub-copulas (in a high-dimensional framework) and we provide some approximation results. Practical implications in copula-based inferential procedures are also discussed.

Thursday, 15:00-15:45 Hörsaal 414, 1. Stock

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