



31 May - 03 June 2016

at
ISEG- Lisbon School of Economics
and Management

SUBMISSION FORM

Name: Sebastian Fuchs	Company: Technische Universität Dresden, 01062 Dresden, Germany
T:	M: Zellescher Weg 12-14, 01069 Dresden
E: sebastian.fuchs1@tu-dresden.de	
Title of Presentation: On Copulas and Measures of Concordance	
Session to appear in program: Copulas: theory and applications	
Author/s:	
1. Sebastian Fuchs	2.
3.	4.

What will your final submission be? Presentation and Paper Presentation Only

If selected, what level of knowledge will delegates attending your session require? (please select only one)

No prior knowledge General industry knowledge assumed Technical/specific industry knowledge assumed

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IAP: Instituto dos Atuários Portugueses

Campo Grande 28, 8 C 1700-093 Lisboa
Portugal

TEL: + 351 21 846 38 82

Email: astincolloquium2016@gmail.com

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ABSTRACT

On Copulas and Measures of Concordance *Sebastian Fuchs*

Key words:

Copulas, Transformations, Group, Symmetry, Order, Measures of Concordance

Abstract:

We study a group of transformations mapping the collection of all copulas into itself. For every copula, they generate a variety of new copulas; this is of particular interest with regard to asymmetric copulas and may also be useful for proving that certain real functions on the unit square are indeed copulas.

The group contains a subgroup whose elements turn out to preserve symmetry, the order between two copulas and the value of every measure of concordance. This subgroup is also of particular importance for the construction of measures of concordance.

In addition, the group provides a simple condition on copulas under which every measure of concordance of the copula is equal to zero.

Literature:

Fuchs S, Schmidt KD (2014) *Bivariate copulas: Transformations, asymmetry and measures of concordance*. Kybernetika 50(1), 109--125.

Fuchs S (2014) *Multivariate copulas: Transformations, symmetry, order and measures of concordance*. Kybernetika 50(5), 725--743.

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