

### 40th Linz Seminar on Fuzzy Set Theory

# **Copulas Theory and Applications**

Bildungshaus St. Magdalena, Linz, Austria June 6-9, 2023

## **Program**

#### Tuesday, June 6, 2023

09:00 am **OPENING** 09:30 am IRÈNE GIJBELS Copula-based dependence measures between random vectors 10:30 am **COFFEE BREAK** 11:00 am DAMJANA KOKOL BUKOVŠEK, BLAŽ MOJŠKERC, NIK STOPAR On the exact regions determined by pairs of various concordance measures 11:30 am ERICH PETER KLEMENT, DAMJANA KOKOL BUKOVŠEK, MATJAŽ OMLADIČ, SUSANNE SAMINGER-PLATZ, **NIK STOPAR** Copulas with given values on a given set FABRIZIO DURANTE, CÉSAR GARCÍA-GÓMEZ, ANA PÉREZ, MERCEDES PRIETO-ALAIZ 12:00 pm Contagion of deprivations and affluences: a tail dependence story 12:30 pm LUNCH 03:00 pm ALFRED MÜLLER Decisions under uncertainty: sufficient conditions for multivariate almost stochastic dominance 04:00 pm **COFFEE BREAK** 04:30 pm MARCO TSCHIMPKE, SEBASTIAN FUCHS Dependence property for comparison of bivariate measures of concordance for copulas UMBERTO CHERUBINI, SABRINA MULINACCI 05:00 pm Dependence orders and copula issues arising from public rescue of bank defaults 05:30 pm GIOVANNA NAPPO Relations between copula-based dependence and ageing. A new approach based on partial orderings for copulas

#### Wednesday, June 7, 2023

09:00 am	Andrea Mesiarová-Zemánková Uninorms, n-uninorms and pseudo-uninorms with continuous underlying functions
10:00 am	Kamila Houšková, Mirko Navara Relations between the shapes of triangular norms and their generators
10:30 am	COFFEE BREAK
11:00 am	NICOLAS DIETRICH, THIMO KASPER, WOLFGANG TRUTSCHNIG  Multivariate Archimedean copulas and the Williamson transform
11:30 am	Sabrina Mulinacci, Massimo Ricci Pseudo lack-of-memory properties and related copula functionss
12:00 pm	DAMJANA KOKOL BUKOVŠEK, TOMAŽ KOŠIR, BLAŽ MOJŠKERC, MATJAŽ OMLADIČ On extreme generators of shock-induced copulas
12:30 pm	LUNCH

#### Wednesday, June 7, 2023

03:00 pm MARTIN BLADT, ALEXANDER MCNEIL

On infinite-order s-vine copula processes

03:30 pm AYYUB SHEIKHI, LUCIANA DALLA VALLE, RADKO MESIAR

Copula-based change point detection in non-stationary multivariate time series with mixture

marginals

04:00 pm COFFEE BREAK 04:30 pm ROUND TABLE

#### Thursday, June 8, 2023

09:00 am FANG HAN

Chatterjee's rank correlation: what is new?

10:00 am Jonathan Ansari, Sebastian Fuchs:

A simple extension of Azadkia & Chatterjee's rank correlation to a vector of endogenous

variables

10:30 am COFFEE BREAK

11:00 am Sebastian Fuchs, Jonathan Ansari

A model-free and dependence-based forward feature selection for multi-response data and a

tool for identifying networks between variables

11:30 am MATJAŽ OMLADIČ

New classes of multivariate quasi-copulas emerging from the Dedekind-MacNeille completion of

multivariate copulas

12:00 pm MICHAEL WINTER

A relational algebraic approach to universal integrals

12:30 pm LUNCH

03:30 pm SOCIAL PROGRAM AND DINNER

#### Friday, June 9, 2023

09:30 am	JEAN-DAVID FERMANIAN,	BENJAMIN POIGNARD

Sparse M-estimators in semi-parametric copula models

10:00 am ECKHARD LIEBSCHER

Approximation of copulas using Cramér-von Mises statistics in the case of missing data

10:30 am MARTA NAI RUSCONE, ANTONIO D'AMBROSIO

Non-metric unfolding via copula

11:00 am COFFEE BREAK

11:30 am ROBERTO GHISELLI RICCI

Distorted copulas

12:00 pm Susanne Saminger-Platz, Adam Šeliga, Anna Kolesarova, Radko Mesiar,

ERICH PETER KLEMENT

On perturbation and truncation involving Fréchet-Hoeffding bounds

12:30 pm LUNCH

02:00 pm ROUND TABLE

03:00 pm CLOSING