# LINZ 2003

# 24<sup>th</sup> Linz Seminar on Fuzzy Set Theory TRIANGULAR NORMS AND RELATED OPERATORS IN MANY-VALUED LOGICS

Bildungszentrum St. Magdalena, Linz, Austria February 4 – 8, 2003

# Program

## Tuesday, February 4, 2003

9:00 am – 10:00 am Enric Trillas, *Ten years later: lessons from a polemics* 10:30 am – 12:30 am Siegfried Gottwald, *Universes of fuzzy sets - A survey of the different approaches* Petr Hájek, *Embedding standard BL-algebras into non-commutative pseudo-BL-algebras* Ulrich Höhle, *Group-like structures on M-valued sets* 

3:00 pm – 4:30 pm Sándor Jenei, *How to construct left-continuous triangular norms – state of the art 2002* Wladislaw Homenda, *Triangular norms, uni- and nullnorms, balanced norms: the cases of the hierarchy of iterative operators* 

5:00 pm – 6:00 pm Andrea Mesiarová, *Triangular subnorms and residual implications* Peter Viceník, *Generalizations of some constructions of triangular norms* 

# Wednesday, February 5, 2003

9:00 am – 10:30 am
János C. Fodor, Bernard De Baets, Tomasa Calvo, Structure of uninorms with given continuous underlying t-norms and t-conorms
Glad Deschrijver, Etienne E. Kerre, The residuation principle for intuitionistic fuzzy t-norms
11.00 am – 12:30 am
Michal Baczynski, On the characterizations of intuitionistic fuzzy implications
Carol L. Walker, Elbert A. Walker, T-norms on fuzzy sets of type-2
Adrian I. Ban, Defects of properties of the triangular norms

3:00 pm – 4:30 pm
Roberto Ghiselli Ricci, *Finitely and absolutely non idempotent aggregation operators*Gleb Beliakov, *Fitting aggregation operators to data*Sándor Jenei, *Recent results on rotation and rotation-annihilation: symmetrization and compensative operators*

5:00 pm – 6:00 pm

Susanne Saminger, Special operators dominating continuous Archimedean t-norms Gaspar Mayor, Joan Torrens, *T-norms on countable bounded chains* 

## Thursday, February 6, 2003

9:00 am – 10:00 am
Roger B. Nelsen, *Copulas: An introduction to their properties and applications*10:30 am – 12:30 am
Erich Peter Klement, Radko Mesiar, Endre Pap, *Copulas: uniform approximation, invariance, and applications in aggregation*Bernard De Baets, *T-norms and copulas in fuzzy preference modelling*Hans De Meyer, *The role of copulas in discrete and continuous dice models*

2:15 pm – 10:00 pm Excursion to St. Florian

## Friday, February 7, 2003

9:00 am – 10:30 am
Vilém Novák, On fuzzy type theory
Guram Bezhanishvili, Mai Gehrke, John Harding, Carol L. Walker, Elbert A. Walker, Varieties generated by t-norms
11:00 am – 12:30 am
Hélène Fargier, Régis Sabbadin, Additive refinements of qualitative decision criteria. Part I: Possibilistic preference functionals
Didier Dubois, Hélène Fargier, Régis Sabbadin, Additive refinements of qualitative decision criteria. Part II: Sugeno integral
Ulrich Bodenhofer, Applications of fuzzy orderings: an overview

3:00 pm – 4:00 pm Irina Perfilieva, Siegfried Gottwald, *Fuzzy function as a solution to a system of fuzzy relation equations* Irina Georgescu, *Compatible extensions of fuzzy relations* 

4:30 pm – 6:00 pm Round Table – Open Problems Session

#### Saturday, February 8, 2003

9:00 am – 10:30 am Michel Grabisch, *Aggregation on bounded bipolar scales* Wolfgang Sander, Jens Siedekum, *Addition, multiplication and distributivity* 11:00 am – 12:00 am Márta Takács, *Decision-making in fuzzy logic control with degree of coincidence* 

Mirko Navara, Pavel Pták, Convex structure of the space of fuzzy measures