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FLLL – FUZZY LOGIC LABORATORIUM LINZ

## **LOCATION OF THE SEMINAR**

Bildungszentrum St. Magdalena  
Schatzweg 177, A-4040 Linz (Austria)  
Phone (++)43 (732) 25 30 41 - 0

All sessions are held in Vortragssal 1

### **Meals**

Breakfast 8:00 a.m.

Lunch 12:30 p.m.

### **Exchange of foreign currency**

Monday, September 7, 1:00 p.m. – 2:30 p.m.

## **PROGRAM COMMITTEE**

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DAN BUTNARIU (Haifa, Israel) \* DIDIER DUBOIS (Toulouse, France) \* SIEGFRIED GOTTWALD  
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ALDO VENTRE (Napoli, Italy) \* SIEGFRIED WEBER (Bogotá, Colombia)

## **EXECUTIVE COMMITTEE**

ERICH PETER KLEMENT \* ULRICH HÖHLE \* STEPHEN E. RODABAUGH \* SIEGFRIED WEBER



*14<sup>th</sup> Linz Seminar on Fuzzy Set Theory*

**Non-Classical Logics  
and their Applications**

Bildungszentrum St. Magdalena, Linz, Austria

September 7–11, 1992

**PROGRAM**

## Monday, September 7

- 9:00 a.m. **Opening Session**  
**Daniele Mundici (Milano)**  
*Recent progress in many-valued logic*
- 10:30 a.m. Coffee Break
- 11:00 a.m. **Lawrence P. Belluce (Vancouver)**  
 *$\sigma$ -complete MV-algebras*
- 11:45 a.m. **Antonio Di Nola (Napoli)**  
*Infinitesimals in MV-algebra theory*
- 12:30 p.m. Lunch
- 2:30 p.m. **Revaz Grigolia (Tbilisi)**  
*Free and projective Heyting and monadic Heyting algebras*
- 3:15 p.m. **Ewa Orłowska (Warszawa)**  
*Relationship between non-classical logics and relation algebras*
- 4:00 p.m. Coffee Break
- 4:30 p.m. **Siegfried Gottwald (Leipzig)**  
*Fuzzy relations with graded properties*
- 5:15 p.m. **Costas A. Drossos (Patras)**  
*Fuzzy powers*
- 8:00 p.m. **Opening of the Exhibition**

## Tuesday, September 8

- 9:00 a.m. **Oswald Wyler (Pittsburgh)**  
*Fuzzy logic and categories of fuzzy sets – answers and questions*
- 10:30 a.m. Coffee Break
- 11:00 a.m. **Christopher J. Mulvey (Brighton)**  
*The quantal geometry of space and logic*
- 12:30 p.m. Lunch
- 2:30 p.m. **Lawrence N. Stout (Bloomington)**  
*Categories of fuzzy sets with values in a quantale or projectale*
- 3:15 p.m. **Ulrich Höhle (Wuppertal)**  
*Local existence in Lukasiewicz logic and sheaves over complete MV-algebras*
- 4:00 p.m. Coffee Break
- 4:30 p.m. **Round Table I**  
*Cl-monoids and non-classical logics*

## Wednesday, September 9

- 9:00 a.m. **Vilém Novák (Ostrava)**  
*On the ultraproduct theorem in fuzzy logic*
- 9:45 a.m. **Esko Turunen (Lappeenranta)**  
*MV-algebra: the basis of fuzzy logic*
- 10:30 a.m. Coffee Break
- 11:00 a.m. **Frank Klawonn (Braunschweig)**  
*Prolog extensions to many-valued logics*
- 11:45 a.m. **Ladislav J. Kohout (Tallahassee)**  
*Epistemological aspects of many-valued logics and models*
- 12:30 p.m. Lunch
- 2:00 p.m. **Excursion to Kremsmünster**

## Thursday, September 10

- 9:00 a.m. **Patrik Eklund (Åbo)**  
*Neural logic – a basis for second generation fuzzy controllers*
- 9:45 a.m. **László T. Kóczy (Budapest)**  
*Techniques of inference in insufficient and inconsistent fuzzy rule bases*
- 10:30 a.m. Coffee Break
- 11:00 a.m. **Jérôme Lang (Toulouse, with D. Dubois & H. Prade)**  
*A brief overview of possibilistic logic*
- 11:45 a.m. **Andreas Geyer-Schulz (Wien)**  
*Fuzzy rule languages and genetic algorithms*
- 12:30 p.m. Lunch
- 2:30 p.m. **Round Table II**  
*Fuzzy control and non-classical logics*
- 4:00 p.m. Coffee Break
- 4:30 p.m. **Werner Gähler (Berlin)**  
*Fuzzy topology from the monadic point of view*
- 5:15 p.m. **Alexander Sostak (Riga)**  
*On a concept of a fuzzy category*

## Friday, September 11

- 9:00 a.m. **Herbert Toth (Wien)**  
*About the metascientific status, the epistemological foundation, and some pitfalls of fuzzy set theory*
- 9:45 a.m. **Juan L. Castro (Granada, with J.M. Zurita)**  
*A fuzzy logic ATMS*
- 10:30 a.m. Coffee Break
- 11:00 a.m. **János C. Fodor (Budapest)**  
*Fuzzy connectives based on matrix logic*
- 11:45 a.m. **Tibor Keresztfalvi (Budapest, with J.C. Fodor)**  
*Conjunctions and implications in GMP*
- 12:05 p.m. **M.M. Zahedi (Kerman)**  
*L-fuzzy semiprimary ideals*
- 12:30 p.m. Lunch
- 2:30 p.m. **Round Table III**  
*Fuzzy set theory and non-classical logics – perspectives and problems*
- 4:00 p.m. **Closing Session**
- 4:15 p.m. **End of the Seminar**

### Social Program

#### Sunday, September 6

7:30 p.m.–10:00 p.m. Informal Get-Together

#### Monday, September 7

8:00 p.m. Opening of the Exhibition Peter Kotauczek: Robot-Painting mit Fuzzy Logic

#### Wednesday, September 9

2:00 p.m.–10:00 p.m. Excursion by bus to Kremsmünster  
Visit of the Monastery and the Observatory in the "Mathematical Tower"  
Knödel Dinner at the Restaurant Freiseder on the Pöstlingberg in Linz