

AGOP 2015



**8th International Summer School
on Aggregation Operators (AGOP 2015)**

July 7–10, 2015, Katowice (Poland)
University of Silesia

CONFERENCE PROGRAMME

Final Version: July 5, 2015



Conference place, 1st day, part I:

Aula im. Kazimierza Lepszego, Rectorate of the University of Silesia in Katowice, ul. Bankowa 12, floor I

8¹⁵ – 9⁰⁰ REGISTRATION *(Rectorate of the University of Silesia, floor I)*

9⁰⁰ – 9¹⁵ OPENING OF THE SUMMER SCHOOL

SESSION 1 (Invited talk) **CHAIR:** RADKO MESIAR

9¹⁵ – 10⁰⁰ BALASUBRAMANIAM JAYARAM
FUZZY IMPLICATIONS: SOME ALGEBRAIC PERSPECTIVES

SESSION 2 (Regular talks) **CHAIR:** BRUNO TEHEUX

10⁰⁵ – 10²⁵ SEBASTIA MASSANET, DANIEL RUIZ-AGUILERA, JOAN TORRENS
DEFINING COPULAS FROM FUZZY IMPLICATION FUNCTIONS

10²⁵ – 10⁴⁵ GRAALIZ PEREIRA DIMURO, BENJAMN BEDREGAL
FUZZY IMPLICATIONS AND THE LAW OF O-CONDITIONALITY: THE CASE OF RESIDUAL IMPLICATIONS DERIVED FROM OVERLAP FUNCTIONS

10⁴⁵ – 11⁰⁵ MAREK GAGOLEWSKI
SOME ISSUES IN AGGREGATION OF MULTIDIMENSIONAL DATA

11⁰⁵ – 11³⁵ **Coffee break**

SESSION 3 (Regular talks) **CHAIR:** JÓZSEF DOMBI

11³⁵ – 11⁵⁵ ESTEBAN INDURÁIN, VLADIMÍR JANIŠ, SUSANA MONTES
DIFFERENT KINDS OF GENERALIZED CONVEXITY RELATED TO AGGREGATION OF FUZZY SETS

11⁵⁵ – 12¹⁵ URSZULA BENTKOWSKA, JÓZEF DREWNIAK
AGGREGATIONS OF MN-CONVEX FUNCTIONS ON COMPLETE LATTICES

12¹⁵ – 12³⁵ MARTA CARDIN
SYMMETRIC AGGREGATION OPERATORS ON COMPLETE LATTICES

12³⁵ – 12⁵⁵ DANA HLINĚNÁ, MARTIN KALINA, PAVOL KRÁĽ
ON A CLASS OF UNINORMS WHICH ARE NOT LOCALLY INTERNAL ON THE BOUNDARY

12⁵⁵ – 13¹⁵ JOZEF KOMORNÍK, MAGDA KOMORNÍKOVÁ, JANA KALICKÁ
PERTURBATIONS OF TAIL DEPENDENCIES OF COPULAS

13³⁰ – 14³⁰ **Lunch (Hotel Novotel Katowice Centrum)**

AGOP 2015
Katowice



P R O G R A M M E

TUESDAY, JULY 7, 2015

Conference place, 1st day, part II:

Centre for Scientific and Academic Library (CINiBA) in Katowice, ul. Bankowa 11a, ground floor

SESSION 4 (Invited talk) **CHAIR:** JEAN-LUC MARICHAL

15⁴⁵ – 16³⁰

MACIEJ SABLIK

A CONVERSE TO FUBINI THEOREM AND A DESCRIPTION OF MEANS

SESSION 5 (Regular talks) **CHAIR:** LEMNAOUAR ZEDAM

16³⁰ – 16⁵⁰

SEBASTIA MASSANET, JUAN VICENTE RIERA, JOAN TORRENS,
ENRIQUE HERRERA-VIEDMA

*SUBJECTIVE LINGUISTIC PREFERENCE RELATIONS AND THEIR
APPLICATION IN GROUP DECISION MAKING*

16⁵⁰ – 17¹⁰

DORETTA VIVONA, MARIA DIVARI

*ON INFORMATION RECEPTION AND SOME OF ITS AGGREGATION
OPERATORS*

17¹⁰ – 17³⁰

Coffee break

SESSION 6 (Regular talks) **CHAIR:** SIMON JAMES

17³⁰ – 17⁵⁰

JUN LI, SUQIN MIN, XIAOLI HU

A NOTE ON THE KRUSE INTEGRAL BASED ON λ -MEASURES

17⁵⁰ – 18¹⁰

ANNA KOLESÁROVÁ, RADKO MESIAR, ANDREA STUPŇANOVÁ
*FUNCTIONAL TRANSFORMATIONS OF SPECIAL CLASSES
OF AGGREGATION FUNCTIONS*

18¹⁰ – 18³⁰

JANA ŠPIRKOVÁ

*STANDARD, WEAK AND DIRECTIONAL MONOTONICITY OF MIXTURE
FUNCTIONS*

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P R O G R A M M E

WEDNESDAY, JULY 8, 2015

Conference place, 2nd day, part I:

Centre for Scientific and Academic Library (CINiBA) in Katowice, ul. Bankowa 11a, ground floor

SESSION 7 (Tutorial) **CHAIR:** BALASUBRAMANIAM JAYARAM

9⁰⁰ – 11⁰⁰ BERNARD DE BAETS
*THE ROLE OF AGGREGATION FUNCTIONS IN FUZZY RELATIONAL
CALCULUS*

11⁰⁰ – 11²⁰ **Coffee break**

SESSION 8 (Regular talks) **CHAIR:** PAWEŁ DRYGAŚ

11²⁰ – 11⁴⁰ SEBASTIA MASSANET, DANIEL RUIZ-AGUILERA AND JOAN TORRENS
*IMPLICATIONS SATISFYING THE LAW OF IMPORTATION WITH A GIVEN
UNINORM REVISITED*

11⁴⁰ – 12⁰⁰ WANDA NIEMYSKA, MICHAŁ BACZYŃSKI
*ON THE FUNCTIONAL EQUATION $f(m_1(x+y)) = m_2(f(x) + f(y))$ FOR
INJECTIVE FUNCTION m_2*

12⁰⁰ – 12²⁰ NAGESWARA RAO VEMURI, BALASUBRAMANIAM JAYARAM
*PRESERVATION OF THE EXCHANGE PRINCIPLE UNDER LATTICE
OPERATIONS ON FUZZY IMPLICATIONS*

12³⁰ – 13¹⁵ **Sightseeing CINiBA**

13³⁰ – 14³⁰ **Lunch (Hotel Novotel Katowice Centrum)**

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P R O G R A M M E

WEDNESDAY, JULY 8, 2015

Conference place, 2nd day, part II:

Centre for Scientific and Academic Library (CINiBA) in Katowice, ul. Bankowa 11a, ground floor

SESSION 9 (Invited talk) **CHAIR:** ESTEBAN INDURÁIN

15⁴⁵ – 16³⁰

JÓZSEF DOMBI
ON CONSISTENT OPERATOR SYSTEMS

SESSION 10 (Regular talks) **CHAIR:** SEBASTIA MASSANET

16³⁰ – 16⁵⁰

MÁRIA NAVAROVÁ, MIRKO NAVARA
*MEASURES ON INTERVAL-VALUED FUZZY SETS AND IF-SETS
AND PRINCIPLE OF INCLUSION AND EXCLUSION*

16⁵⁰ – 17¹⁰

ANDRZEJ WÓJTOWICZ, PATRYK ŻYWICA, ANNA STACHOWIAK,
KRZYSZTOF DYCZKOWSKI
*INTERVAL-VALUED AGGREGATION AS A TOOL TO IMPROVE MEDICAL
DIAGNOSIS*

17¹⁰ – 17³⁰

Coffee break

SESSION 11 (Regular talks) **CHAIR:** MIRKO NAVARA

17³⁰ – 17⁵⁰

BAPI DUTTA, DEBASHREE GUHA
*AN INTELLIGENT AGGREGATION TECHNIQUE FOR CAPTURING
HETEROGENEOUS RELATIONSHIP AMONG INPUTS*

17⁵⁰ – 18¹⁰

H. SANTOS, L. LIMA, B. BEDREGAL, G.P. DIMURO, M. ROCHA, H. BUSTINCE
*ANALYZING SUBDISTRIBUTIVITY AND SUPERDISTRIBUTIVITY
ON OVERLAP AND GROUPING FUNCTIONS*

18¹⁰ – 18³⁰

HUMBERTO BUSTINCE, LAURA DE MIGUEL, DANIEL PATERNAIN,
MARÍA JESÚS CAMPIÓN, ESTEBAN INDURÁIN
*ON INTERNAL OPERATORS AND MULTIVARIATE AGGREGATION
FUNCTIONS*

18³⁰ – 19⁰⁰

Problems and Remarks



Conference place, 3rd day:

Centre for Scientific and Academic Library (CINiBA) in Katowice, ul. Bankowa 11a, ground floor

SESSION 12 (Tutorial) **CHAIR:** HUMBERTO BUSTINCE

8³⁰ – 10³⁰

RADKO MESIAR

AGGREGATION FUNCTIONS BASED ON INTEGRALS WITH RESPECT TO MONOTONE MEASURES

10³⁰ – 10⁵⁰

Coffee break

SESSION 13 (Regular talks) **CHAIR:** BERNARD DE BAETS

10⁵⁰ – 11¹⁰

LAURA DE MIGUEL, HUMBERTO BUSTINCE, JAVIER FERNANDEZ,
ANNA KOLESÁROVÁ, RADKO MESIAR, BERNARD DE BAETS
CONSTRUCTION OF ADMISSIBLE ORDERS FOR INTERVALS

11¹⁰ – 11³⁰

G. BELIAKOV, S. JAMES, D. GÓMEZ, J.T. RODRÍGUEZ, J. MONTERO
LEARNING STABLE WEIGHTS FOR DATA OF VARYING DIMENSION

11³⁰ – 11⁵⁰

MIGUEL COUCEIRO, JEAN-LUC MARICHAL, BRUNO TEHEUX
MEDIAN PRESERVING AGGREGATION FUNCTIONS

11⁵⁰ – 12¹⁰

JOZO DUJMOVIĆ

AN EFFICIENT ALGORITHM FOR GENERAL WEIGHTED AGGREGATION

12¹⁰ – 12³⁰

Problems and Remarks

12³⁰ – 13⁰⁰

Cold Lunch (CINiBA)

14⁰⁰ – 22³⁰

Excursion and Banquet

Excursion (by bus) to Nikiszowiec estate and Prince's Brewery in Tychy.

Gala Dinner will take place in Hunting Lodge Promnice (Zameczek Myśliwski Promnice), 30 km from Katowice. The castle was built in 1861. It was favourite resting place for Princess Daisy (Mary Theresa Olivia Cornwallis-West).

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P R O G R A M M E

FRIDAY, JULY 10, 2015

Conference place, 4th day, part I:

Centre for Scientific and Academic Library (CINiBA) in Katowice, ul. Bankowa 11a, ground floor

SESSION 14 (Tutorial) **CHAIR:** MACIEJ SABLIK

9⁰⁰ – 11⁰⁰

JEAN-LUC MARICHAL, BRUNO TEHEUX
*GENERALIZATIONS AND VARIANTS OF ASSOCIATIVITY FOR
AGGREGATION FUNCTIONS*

11⁰⁰ – 11²⁰

Coffee break

SESSION 15 (Regular talks) **CHAIR:** JOZO DUJMOVIĆ

11²⁰ – 11⁴⁰

ALEXANDRA ŠIPOŠOVÁ, LADISLAV ŠIPEKY, FABIO RINDONE
*SUPER- AND SUBADDITIVE CONSTRUCTIONS OF AGGREGATION
FUNCTIONS*

11⁴⁰ – 12⁰⁰

BARBARA PEKALA
SIMILARITY MEASURE DEFINED FROM OVERLAP FUNCTION

12⁰⁰ – 12²⁰

ANNA CENA, MAREK GAGOLEWSKI
AGGREGATION AND SOFT CLUSTERING OF INFORMETRIC DATA

12³⁰ – 13³⁰

Sightseeing NOSPR (National Polish Radio Symphonic Orchestra)

13⁴⁵ – 14⁴⁵

Lunch (Hotel Novotel Katowice Centrum)

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FRIDAY, JULY 10, 2015

Conference place, 4th day, part II:

Centre for Scientific and Academic Library (CINiBA) in Katowice, ul. Bankowa 11a, ground floor

SESSION 16 (Regular talks) **CHAIR:** MARTIN KALINA

15³⁰ – 15⁵⁰

JOSÉ M. MERIGÓ, RONALD R. YAGER
THE ORDERED WEIGHTED AVERAGE SUM

15⁵⁰ – 16¹⁰

PAWEŁ DRYGAŚ, FENG QIN, EWA RAK
THE DISTRIBUTIVITY BETWEEN SEMI-T-OPERATORS AND UNINORMS

16¹⁰ – 16³⁰

PAWEŁ DRYGAŚ, EWA RAK, LEMNAOUAR ZEDAM
DISTRIBUTIVITY OF AGGREGATION OPERATORS WITH 2-NEUTRAL ELEMENTS

16³⁰ – 16⁵⁰

Coffee break

SESSION 17 (Regular talks) **CHAIR:** JOSÉ M. MERIGÓ

16⁵⁰ – 17¹⁰

EMEL AŞICI, FUNDA KARAÇAL
INCOMPARABILITY WITH RESPECT TO THE T-PARTIAL ORDER ON BOUNDED LATTICES

17¹⁰ – 17³⁰

ANNA KRÓL
FUZZY (C, I)-EQUIVALENCES

17³⁰ – 17⁵⁰

URSZULA BENTKOWSKA, JÓZEF DREWNIAK
CONVEXITY WITH RESPECT TO AGGREGATIONS

17⁵⁰ – 18⁰⁰

CLOSING SESSION