

# Program Outline



**Monday, June 24th 2013**

Location: ETLC, NREF Buildings, University of Alberta

8:45am 9:00am	<b>Opening Session</b>			
9:00am 9:50am	Keynote Presentation: <b>Toward a Restriction-Centered Theory of Truth and Meaning</b> <b>Lotfi A. Zadeh</b>			
9:50am 10:10am	<b>Coffee break</b>			
room	<b>ETLC E1-003</b>	<b>ETLC E1-017</b>	<b>NREF 2-001</b>	<b>NREF 2-003</b>
10:10am 11:10am	S-35: Data Analysis: Data Imbalance and Outliers	S-44: Evolutionary Computing: Fuzzy and Granular based Systems	S-18: Mathematics I	S-27: Fuzzy Sets and Fuzzy Ideas
11:10am 12:10pm	S-19: Mathematics II	S-39: Data Analysis: Grouping and Feature Selection	S-22: Rough Sets	FS-25: Fuzziness and Medicine I
12:10pm 1:15pm	<b>Lunch</b>			
1:15pm 1:45pm	<b>Memories of Professors Kiyoji Asai and Hideo Tanaka (Part I)</b>			
1:45pm 2:45pm	<b>Memories of Professors Kiyoji Asai and Hideo Tanaka (Part II)</b>			
2:45pm 3:45pm	FS-38: Optimization under Flexibility and Generalized Uncertainty I	S-26: Fuzzy Lattices	S-20: Mathematics III	FS-26: Fuzziness and Medicine II
3:45pm 4:05pm	<b>Coffee break</b>			
4:05pm 5:05pm	FS-39: Optimization under Flexibility and Generalized Uncertainty II	S-34: Formal Concept Analysis and Petri Nets	S-33: Risk Management	FS-27: Fuzziness and Medicine III

**Welcome Reception 5:30pm**

Location: Solarium

## Tuesday, June 25th 2013

Location: ETLC, NREF Buildings, University of Alberta

9:00am 9:50am	Keynote Presentation: <b>Bio-Inspired Optimization of Type-2 Fuzzy Systems in Intelligent Control Applications</b> <b>Oscar Castillo</b>			
9:50am 10:10am	<b>Coffee break</b>			
room	<b>ETLC E1-003</b>	<b>ETLC E1-017</b>	<b>NREF 2-001</b>	<b>NREF 2-003</b>
10:10am 11:10am	FS-40: Optimization under Flexibility and Generalized Uncertainty III	S-43: Optimization Algorithms in Fuzzy System Development	S-31: Recognition of Human Features	S-04: Linguistic Quantifiers
11:10am 12:10pm	S-25: Interval Valued Fuzzy Systems: Applications	S-24: Rule-based Systems: Rule Mining and Applications	S-45: Fuzzy Modeling	S-46: Similarity Measures
12:10pm 1:15pm	<b>Lunch</b>			
1:15pm 1:45pm	Special Lecture: <b>Techniques of Fuzzy Natural Logic in Modelling</b> <b>Vilem Novak</b>			
1:45pm 2:45pm	FS-04: Computational Intelligence Techniques for Smart Grids Control and Management	S-21: Classification and Detection	FS-01: Soft approaches to advanced Web Information Retrieval I	FS-08: Inter-Relation Between Interval and Fuzzy Techniques I
2:45pm 3:45pm	FS-18: Fuzzy Logic in Economics and Social Sciences I	S-23: Clustering and Classification	FS-02: Soft approaches to advanced Web Information Retrieval II	FS-09: Inter-Relation Between Interval and Fuzzy Techniques II
3:45pm 4:05pm	<b>Coffee break</b>			
4:05pm 5:25pm	FS-19: Fuzzy Logic in Economics and Social Sciences II	FS-29: Approximation-related Solutions for Big and Complex Data Challenges	FS-11: Models and Methods of Optimization and Decision Making in Fuzzy Environment and Their Applications	FS-10: Inter-Relation Between Interval and Fuzzy Techniques III

## Wednesday, June 26th 2013

Location: ETLC, NREF Buildings, University of Alberta

9:00am 9:50am	Keynote Presentation: <b>Fuzzy Visualization Method of Atmosfield and Kansei-Texture</b> <b>Kaoru Hirota, Fangyan Dong</b>			
9:50am 10:10am	Coffee break			
room	<b>ETLC E1-003</b>	<b>ETLC E1-017</b>	<b>NREF 2-001</b>	<b>NREF 2-003</b>
10:10am 11:10am	S-08: Time Series: Forecasting	FS-22: Soft Computing Models for Engineering, Industrial and Environmental Applications I	FS-20: Soft Computing in Science and Technology Studies I	S-28: Fuzzy Sets in Social Networks
11:10am 12:10pm	S-07: Fuzzy Trees: Basics and Applications	FS-23: Soft Computing Models for Engineering, Industrial and Environmental Applications II	FS-21: Soft Computing in Science and Technology Studies II	FS-12: Recommender and decision systems with soft computing I
12:10pm 1:15pm	Lunch			
1:15pm 1:45pm	Special Lecture: <b>Soft Computing in/by Analytics</b> <b>Christer Carlsson</b>			
1:45pm 2:15pm	Special Lecture: <b>Fuzzy Information Retrieval: One Man's Journey</b> <b>Donald H. Kraft</b>			
2:15pm 2:45pm	Special Lecture: <b>BCI – Bio-Computational Intelligence vs Brain Computer Interface</b> <b>Chin-Teng Lin</b>			
2:45pm 3:15pm	Special Lecture: <b>Type 1 to Full Type 2, ... Full Type n Fuzzy System Models</b> <b>I. Burhan Türkşen</b>			
3:15pm 4:15pm	FS-03: Computing with words in decision making: Foundations, models and applications	FS-24: Soft Computing Models for Engineering, Industrial and Environmental Applications III	S-29: Optimization: Location, Allocation and Transportation	FS-13: Recommender and decision systems with soft computing II
4:15pm 4:35pm	Coffee break			
4:35pm 5:35pm	S-15: Medical Applications and Educational System	S-17: Concepts, Ontology, and Graphs	FS-15: Type-2 Fuzzy Sets in Data Granulation	FS-14: Recommender and decision systems with soft computing III

## Banquet 6:00pm

Location: Fort Edmonton

## Thursday, June 27th 2013

Location: ETLC, NREF Buildings, University of Alberta

9:00am 9:50am	Keynote Presentation: <b>A Special Role of Usuality Qualification in Computing with Words:          Applications in Multiple Problem Areas</b> Janusz Kacprzyk			
9:50am 10:10am	<b>Coffee break</b>			
room	<b>ETLC E1-003</b>	<b>ETLC E1-017</b>	<b>NREF 2-001</b>	<b>NREF 2-003</b>
10:10am 11:10am	S-30: Neural Fuzzy Systems and FCM	S-41: Control: Mamdani and PDI Controllers	S-02: Computing With Words and Prepositions	FS-16: Consensus and Decision Making Under Uncertainty I
11:10am 12:10pm	S-16: Data Analysis	S-05: Regression Analysis and Optimization	FS-33: Fuzzy Intelligent Agent Systems I	FS-17: Consensus and Decision Making Under Uncertainty II
12:10pm 1:15pm	<b>Lunch</b>			
1:15pm 1:45pm	Special Lecture: <b>Fuzzy Logic as a geometry</b> <b>Antonio Di Nola</b>			
1:45pm 2:45pm	S-09: Aggregation	S-10: Fuzzy Numbers	S-14: Control: Water Tank	S-13: Weather and Environment
2:45pm 3:45pm	FS-36: Fuzzy Logic Applications in Construction Engineering and Management I	FS-34: Hybrid Intelligent Systems I	FS-30: Fuzzy Pattern Recognition I	S-37: Water Quality Analysis
3:45pm 4:05pm	<b>Coffee break</b>			
4:05pm 5:25pm	FS-37: Fuzzy Logic Applications in Construction Engineering and Management II	FS-35: Hybrid Intelligent Systems II	FS-31: Fuzzy Pattern Recognition II	FS-28: Complex Fuzzy Sets and Logic

## NAFIPS General Meeting 5:45pm

Location: ETLC E1-003

# Friday, June 28th 2013

Location: ETLC, NREF Buildings, University of Alberta

9:00am 9:50am	Keynote Presentation: <b>Foundations of a Fuzzy Logic-based Theory of Behavioral Decisions</b> <b>Rafik A. Aliev</b>			
9:50am 10:10am	<b>Coffee break</b>			
room	<b>ETLC E1-003</b>	<b>ETLC E1-017</b>	<b>NREF 2-001</b>	<b>NREF 2-003</b>
10:10am 11:10am	S-40: Fuzzy Logic	S-11: Interval-based Modeling and Programming	FS-06: Soft Computing in Intelligent Data Processing and Summarization I	FS-41: Advances in Granular Computing and Advances in Rough Sets I
11:10am 12:10pm	S-36: Fuzzy Neural Networks	S-12: Possibility, Probability and Causality	FS-07: Soft Computing in Intelligent Data Processing and Summarization II	FS-42: Advances in Granular Computing and Advances in Rough Sets II
12:10pm 1:15pm	<b>Lunch</b>			
1:15pm 2:15pm	FS-05: Information Aggregation in Theory and Practice	S-32: Management and Supply	S-03: Mobile and Autonomous Systems	S-42: Evolving Techniques in Image, Visual Classification and Controller Design
2:15pm 3:35pm	S-01: Interval-valued Functions and Series Forecasting, Quantum Channels	FS-32: Fuzzy Intelligent Agent Systems II	S-06: Industrial Applications	S-38: Time Series and Time-Space Analysis