THURSDAY, 15TH OCTOBER (morning)

7:30 – 8:30  Registration
8:30 – 9:00  Opening
Crystal Room  [General Chairs, PC Chairs, Local Organization Chairs]

9:00 – 10:00  Plenary
Crystal Room  Epistemic Uncertainty Modeling: The-State-of-the-Art
Hung T. Nguyen, New Mexico State University, USA, and Chiang Mai University, Thailand
Chair: Vladik Kreinovich

10:00 – 10:30  Coffee break

10:30 – 12:10  Parallel Session A: Fuzziness and Knowledge Modelling [30 minutes for invited and 22 minutes for others]
Crystal Room  Chair: Radim Jirousek

What is fuzzy natural logic? [Invited talk]
Vilem Novak, University of Ostrava, Czech Republic
Combining fuzziness and context sensitivity in game based models of vague quantification
Christian Fermüller
New model of a fuzzy associative memory
Irina Perfilieva
Construction of associative functions for several fuzzy logics via the ordinal sum theorem
Mayuka F. Kawaguchi and Michiro Kondo

10:30 – 12:00  Parallel Session B: Data Mining and Uncertainty Management [22 minutes for each presentation]
Lotus Room  Chair: Atsuo Yoshitaka

An ensemble learning approach based on rough set preserving the qualities of approximations
Seiki Ubuakta, Taro Miyazaki, Akira Notsu, Katsuhiro Honda and Masahiro Inuiuchi
Evidence combination focusing on significant focal elements for recommender systems
Van Doan Nguyen, Van Nam Huynh
Applying covering-based rough set theory to user-based collaborative filtering to enhance the quality of recommendations
Zhipeng Zhang, Yasuo Kudo and Tetsuya Murai
Application of Uncertainty Modeling Frameworks to Uncertain Isosurface Extraction
Mahsa Mirzargar, Yanyan He and Mike Kirby

12:10 – 13:40  Lunch
THURSDAY, 15TH OCTOBER (afternoon)

13:40 – 14:40  Plenary
Crystal Room  Ordinal Preference Models - Learning from the Savage's Omelet Problem
Michio SUGENO, European Centre for Soft Computing, SPAIN
Chair: Hung T. Nguyen

14:40 – 15:10  Coffee break

15:10 – 17:00  Parallel Session A: Optimization and Decision Making  [22 minutes for each presentation]
Crystal Room  Chair: Yasuo Kudo
- Logarithmic conversion approach to the estimation of interval priority weights from a pairwise comparison matrix
  Masahiro Inuiguchi and Shigeaki Innan
- On customer satisfaction of battery electric vehicles based on Kano model: a case study in Shanghai
  Yanping Yang, Hong-Bin Yan and Tieju Ma
- Cognitively stable generalized Nash equilibrium in static games with unawareness
  Yasuo Sasaki
- The importance of fuzzy preference in course assignment problem
  Artur Gorka and Phantipa Thipwiwatpotjana
- Maximum lower bound estimation of fuzzy priority weights from a crisp comparison matrix
  Tomoe Entani and Masahiro Inuiguchi

15:10 – 17:00  Parallel Session B: Applied Econometrics  [22 minutes for each presentation]
Lotus Room  Chair: Akira Notsu
- Capital asset pricing model with interval data
  Sutthiporn Piamsuwannakit, K. Autchariyapanitkul, S. Sriboonchitta and Rujira Ouncharoen
- Co-movement and dependency between New York stock exchange, London stock exchange, Tokyo stock exchange, oil price, and gold price
  Pathairat Pastpipatkul, Woraphon Yamaka and Songsak Sriboonchitta
- Spillovers of quantitative easing on financial markets of Thailand, Indonesia, and the Philippines
  Pathairat Pastpipatkul, Woraphon Yamaka, Aree Wiboonpongse and Songsak Sriboonchitta
- Volatility and dependence for systemic risk measurement of the international financial system
  Jianxu Liu, Songsak Sriboonchitta, Panisara Phochanachan and Jiechen Tang
- Impact of quantitative easing policy of United States of America on Thai economy system by MS-SFABVAR
  Pathairat Pastpipatkul, Warawut Ruankham, Aree Wiboonpongse and Songsak Sriboonchitta

17:00 – 18:00  Break and Move to Ngoc Trai Restaurant

18:00 – 20:00  Welcome Reception
FRIDAY, 16TH OCTOBER (morning)

7:30 – 8:30  Registration
9:00 – 10:00  Plenary
Crystal Room  Fuzzy sets, multisets, and rough approximations
              Sadaaki Miyamoto, University of Tsukuba, JAPAN
              Chair: Van-Nam Huynh
10:00 – 10:30 Coffee break

10:30 – 12:00 Parallel Session A: Uncertainty Inference and Optimization [22 minutes for each presentation]
Crystal Room  Chair: Zengchang Qin
Minimum description length principle for compositional model learning
Radim Jirousek and Iva Krejcova
On the property of SIC fuzzy inference model with compatibility functions
Hirosato Seki
Proposal of grid area search with UCB for discrete optimization problem
Akira Notsu, Koki Saito, Yuhumi Nohara, Seiki Ubukata and Katsuhiro Honda
An effective method for optimality test over possible reaction set for maximin solution of bilevel linear programming with ambiguous lower-level objective function
Puchit Sariddichainunta and Masahiro Inuiguchi

10:30 – 12:00 Parallel Session B: Applied Econometrics [22 minutes for each presentation]
Lotus Room  Chair: Hong-Bin Yan
Why ARMAX-GARCH linear models successfully describe complex nonlinear phenomena: a possible explanation
Hung Nguyen, Vladik Kreinovich, Olga Kosheleva and Songsak Sriboonchitta
Volatility linkages between price returns of crude oil and crude palm oil in the ASEAN region: A copula based GARCH approach
Teera Kiatmanaroch, O. Puarattanaarunkorn, K. Autchariyapanitkul and S. Sriboonchitta
The economic evaluation of volatility timing on commodity futures using periodic GARCH-copula model
Xue Gong, Songsak Sriboonchitta and Jianxu Liu
Business cycle of international tourism demand in Thailand: A Markov-switching Bayesian vector error correction model
Woraphon Yamaka, Pathairat Pastpipatkul and Songsak Sriboonchitta

12:00 – 13:30 Lunch

13:30 – 15:10 Parallel Session A: Natural Language Engineering [30 minutes for invited and 22 minutes for others]
Crystal Room  Chair: Hien T. Nguyen
Research on Thai natural language processing and application to news summarization and public hearing [Invited talk]
Thanaruk Theeramunkong, Thammasat University, Thailand
Improving word alignment through morphological analysis
Vuong Van Bui, Thanh T. Tran, Nhat Bich T. Nguyen, Tai Dinh Pham, Anh Ngoc Le, and Cuong Anh Le
A multifaceted approach to sentence similarity
Hien Nguyen, Phuc Duong and Tuan Le
Learning word alignment models for Kazakh-English machine translation
Amandyk Kartbayev
FRIDAY, 16TH OCTOBER (afternoon)

13:30 – 15:20 Parallel Session B: Dependence Modelling and Applied Econometrics [22 minutes for each presentation]
Lotus Room Chair: Masahiro Inuiguchi
Why Copulas?
Vladik Kreinovich, Hung Nguyen, Sriboonchitta Songsak and Olga Kosheleva
A new measure of monotone dependence by using Sobolev norms for copula
Hien D. Tran, Uyen H. Pham, Sel Ly and Trung D. Vo
Western countries' tourist arrivals to Thailand: Estimating Western countries' tourism demand for Thailand at the present of structural change
Nyo Min and Songsak Sriboonchitta
Welfare measurement on Thai rice market: A Markov switching Bayesian seemingly unrelated regression
Pathairat Pastpipatkul, Paravee Manejuk, Songsak Sriboonchitta
Modeling daily peak electricity demand in Thailand
Jirakom Sirisrisakulchai and Songsak Sriboonchitta

15:20 – 15:50 Coffee break

15:50 – 17:30 Parallel Session A: Fuzzy Clustering and Data Mining [22 minutes for each presentation]
Crystal Room Chair: Saddaki Miyamoto
A deterministic clustering framework in MMMs-induced fuzzy co-clustering
Shunnya Oshio, Katsuhiro Honda, Seiki Ubukata and Akira Notsu
FCM-type co-clustering transfer reinforcement learning for non-Markov processes
Akira Notsu, Takanori Ueno, Yuichi Hattori, Seiki Ubukata and Katsuhiro Honda
MMMs-induced fuzzy co-clustering with exclusive partition penalty on selected items
Takaya Nakano, Katsuhiro Honda, Seiki Ubukata and Akira Notsu
Clustering data and vague concepts using prototype theory interpreted label semantics
Zhao Hanzing and Zengchang Qin

16:00 – 17:30 Parallel Session B: Applied Statistics [22 minutes for each presentation]
Lotus Room Chair: Hung T. Nguyen
Confidence intervals for the difference between normal means with known coefficients of variation
Suparat Niwitpong and Sa-Aat Niwitpong
Approximate confidence interval for the ratio of normal means with a known coefficient of variation
Wararit Panichkitkosolkul
Confidence intervals for the ratio of coefficients of variation of the gamma distributions
Patarawan Sangnawakij, Sa-Aat Niwitpong and Suparat Niwitpong
A copula-based stochastic frontier model for financial pricing
Phachongchit Tibprasorn, K. Autchariyapanitkul, Somsak Chaniam and Songsak Sriboonchitta

17:30 – 18:00 Move to Champa Island Restaurant

18:00 – 20:00 Banquet and Closing Session
Chair: Masahiro Inuiguchi and Van-Nam Huynh
SATURDAY, 17TH OCTOBER (morning)

9:00 – 11:30  Scientific Committee Meeting [to be confirmed]

Excursion and Social Program (on demand with payment; please contact local organizer at iukm2015@pou.edu.vn for the detail)