

# Fifth International Conference on Dynamics of Information Systems 2013

February 25th – February 27th, 2013

Center for Applied optimization (CAO),  
Department of Industrial and Systems Engineering,  
University of Florida, USA



# Monday, February 25th

Room 282 Reitz Union

8:45-9:00 Opening remarks by Prof. Panos M. Pardalos

9:00-10:00 Key-note Session: Roman Belavkin  
*Utility, Risk and Information*

10:00-10:15 Coffee Break

10:15-11:45 Session 1

**Stan Uryasev**

*Sparse Signal Reconstruction: a Cardinality Approach*

**Jose L. Walteros**

*Star Partitioning on  $d$ -partite graphs*

**Austin Buchanan**

*On Connected Dominating Sets of Restricted Diameter*

11:45-1:15 Lunch Break

1:15-2:15 Key-note Session: My Thai  
*Dynamic Community Structure Analysis in Complex Networks*

2:15-2:45 Coffee Break

2:45-4:30 Session 2

**Sergiy Butenko**

*On distance-based clique relaxations in unit disk graphs*

**Foad Mahdavi Pajouh**

*New developments on  $k$ -club models in networks*

**Vladimir Boginski**

*Density-based clique relaxations in networks*

**6:30-8:30 Conference Reception Dinner (Matthews Suite, Reitz Union, 4th Floor)**

# Tuesday, February 26th

Room 282 Reitz Union

**9:00-10:00 Key-note Session: Viktor Zamaraev**  
*On coding of graphs from hereditary classes*

**10:00-10:15 Coffee Break**

**10:15-11:45 Session 3**

**Zhen Khan**

*Particle filter based average consensus target tracking with preservation of network connectivity*

**Sankrith Subramanian**

*Throughput maximization in CSMA networks with collisions*

**Ling Wang**

*Adaptive fuzzy control based on binary harmony search*

**11:45-1:15 Lunch Break**

**1:15-2:45 Session 4**

**Stan Uryasev**

*Randomization of Deterministic Models Using Mathematical Programming Approaches*

**Alla Kammerdiner**

*Statistical Inference Techniques for Assessing Cyber Space Security*

**Oleg Prokopyev**

*Irregular Polyomino Tiling via Integer Programming*

**2:45-3:00 Coffee Break**

**3:00-5:00 Session 5**

**Qipeng Zheng**

*Two-Stage Stochastic Security-Constrained Unit Commitment Models Including Demand Response and Energy Storage with Risk Control*

**Anim Adrian Amarsingh**

*Applying wireless sensors to achieve the smart grid*

**Dalila Fontes**

*An approach to the unit commitment problem via optimal control*

**Delphine Mico**

*Estimating the Violation of the KKT Conditions*

# Wednesday, February 27th

Room 282 Reitz Union

**9:00-10:00 Key-note Session: Jose Principe**

*Estimating entropy with Reproducing Kernel Hilbert Spaces*

**10:00-11:00: Session 6**

**Pando Georgiev**

*Nonlinear Blind Signal Separation*

**Syed Mujahid**

*Simplex Representation of Non-negative Mixtures*

**11:00-11:15: Coffee Break**

**11:15-12:45: Session 7**

**Soheil Hemmati**

*Bilevel Mixed-integer Interdiction Model and Exact Algorithm for Weighted Influence Interdiction Problem*

**Khanh Pham**

*A Risk-Averse Differential Game Approach to Multi-Agent Tracking and Synchronization with Stochastic Objects and Command Generators*

**Meir Pachter**

*Informational Issues in Decentralized Control*

**12:45-1:00 Closing Remarks**