

## **Sunday, July 7, 2013**

- 8.30-10.10: Session 1:
  - Identifying Large Dense Clusters in Networks: Exact Optimal Solutions and Asymptotic Phase Transitions, *Vladimir Boginski, Alexander Veremyev, Sergiy Butenko, Pavlo Krokmal, Jeffrey Pattillo and David Jeffcoat*
  - Centrality Measures Based on Communicability Functions, *Christine Klymko and Michele Benzi*
  - From the Birthday Paradox to a Practical Sublinear Space Streaming Algorithm for Triangle Counting, *Madhav Jha, C. Seshadhri and Ali Pinar*
  - Euclidean hub-and-spoke networks, *John Carlsson*
  - On network design under uncertain arc capacities, *Alper Atamturk and Avinash Bhardwaj*
- 10.10 to 10.30: coffee break
- 10:30 to 12:10: Session 2
  - Degree Distributions and the Critical Surface of Epidemic Spreading, *Dong Han and Tze Leung Lai*
  - Cults, mobs and segregation in spread of opinions in co-evolving networks *Nishant Malik and Peter Mucha*
  - Affect of network structure on influence maximization in dynamic networks, *Habiba and Tanya Berger-Wolf*
  - Uncertainty Management for Consensus Problem over Random Graphs, *Hadi Meidani and Roger Ghanem*
- 11:50 to 1:30: Lunch
- 1:30 to 2:20: Invited Talk: Network Science: Algorithms, Epidemiology, Open Questions  
Aravind Srinivasan, University of Maryland, USA
- 2:20 to 3:10: open discussion
- 3:10 to 3:30: coffee break
- 3:40 to 5:10: Session 3
  - Neyman-Pearson Covert Network Detection, *Steven Smith, Kenneth Senne and Edward Kao*
  - Parallel Regularized Markov Clustering (RMCL), *S M Faisal, Siddharth Varia, Srinivasan Parthasarathy and Ponnuswamy Sadayappan*
  - Triangle Core Decompositions and Maximum Cliques, *Ryan Rossi, David Gleich, and Assefaw Gebremedhin*
  - On clustering heterogeneous networks, *Forough Poursabzi Sangdeh and Ananth Kalyanaraman*
  - Graph Clustering in SPARQL, *Adam Lugowski, Steve Reinhardt, Kevin Deweese and John Gilbert*
- 5:10 to 5:40: Poster presentations
- 5:40 to 7:00: Poster viewing

### **Monday, July 8, 2013**

- 8:30 9:15 Invited Talk: Social Networks as Information Filters, *Lada Adamic, U. Michigan, Ann Arbor*
- 9:20 10:00: Session 4
  - Sparsity in network alignment via weight penalties, *David Gleich, Mahantesh Halappanavar, Arif Khan and Alex Pothén*
  - Effect of Network Perturbation on Betweenness Centrality, *Vladimir Ufimtsev, Abhijin Adiga, Sanjukta Bhowmick and Anil Kumar Vullikanti*
- 10:00 10:30: Coffee break
- 10:30 11:30 Session 5
  - Phase Transition and Connectivity in Random Intersection Graphs, *Milan Bradonjic, Aric Hagberg, Nick W. Hengartner, Lemons Nathan and Allon G. Percus*
  - Dynamic networks generative model for skewed component distribution, *Habiba, Chayant Tantipathananandh and Tanya Berger-Wolf*
  - Winning networks with MUSKETEER, *Alexander Gutfraind, Lauren Meyers and Ilya Safro.*
- 11:30 12:20: Open discussion
- 2:00 3:00: Session 6
  - Synchrony in Stochastically Driven Neuronal Network with Complex Topology, *Katherine Newhall, Max Shkarayev, Peter Kramer, Gregor Kovacic and David Cai*
  - A network measure for the analysis of large-scale graphs, *Roldan Pozo*
  - A Simple, Efficient Preconditioner for Graph Laplacians, *Erik G. Boman and Kevin Deweese*
- 3:00 3:30: Wrap-up and next steps

### **List of posters**

- A Scalable Generative Graph Model with Community Structure for Benchmarking, *Tamara Kolda, Ali Pinar, Todd Plantenga and C. Seshadhri*
- Characterizing Important Nodes in a Network as Effective Spreaders, *Fern Hunt.*
- The OFDMA WMN Resource Allocation Problem, *Miri Priesler and Arie Reichman.*
- Quantification of longitudinal changes in cortical network circuitry prompted by traumatic brain injury, *Andrei Irimia, Matthew Goh, Carinna Torgerson, Micah Chambers, Bo Wang, Marcel Prastawa, Paul Vespa, Jeffry Alger, Guido Gerig, Stephen Aylward, Arthur Toga, Ron Kikinis and John Van Horn.*
- Fair sharing of resources in a supply network with constraints, *Rui Carvalho, Lubos Buzna, Wolfram Just, Dirk Helbing and David Arrowsmith.*
- Mathematical Macrosimulation of Different Control Strategies in Congestion Propagation, *Seyed Hossein Hosseini Nourzad and Anu Pradhan.*
- Exploring Paths Through Large Networks, *Emilie Hogan, John Johnson and Mahantesh Halappanavar.*
- FASCIA: Fast Approximate Subgraph Counting and Enumeration, *George Slota and Kamesh Madduri.*
- Robust Network Clusters with Short Path Connectivity Constraints, *Alexander Veremyev, Vladimir Boginski and Eduardo Pasiliao.*
- Clique Relaxations in Network Analysis, *Sergiy Butenko.*
- Analyzing Shakespeare's Plays From A Network Perspective, *Vikas Thotakuri and Sanjukta Bhowmick*
- Population Persistence in River Networks, *Jonathan Sarhad, Robert Carlson, and Kurt E. Anderson*