



AMERICAN UNIVERSITY
WASHINGTON, DC
Info-Metrics Institute

Information and Econometrics of Networks

American University Campus
March 30 – 31, 2012

Program

FRIDAY MARCH 30

(Location: MGC 4 & 5)

- 8:30 AM *(Shuttle service provided from Dupont Circle to American University departs The Churchill Hotel no later than 8:35 AM)*
- 8:30-9:30 AM Registration-Coffee-Refreshments
- 9:30-9:35 AM **Welcoming Remarks**
Peter Starr (Dean of College of Arts & Sciences, American U)
- 9:35-10:00 AM **Info-Metrics and Workshop's Objectives**
Amos Golan (American U)
- 10:00-12:00 PM **SESSION I: Info-Metrics, Systemic Risk and Finance - I**
Session Organizer – Michael J. Stutzer
Chair: *Duncan Foley* (New School for Social Research and Santa Fe Inst.)
1. Entropy in Financial Network Contagion Research
Michael J. Stutzer (U. Colorado)
 2. Systemic Risk and Network Formation in the Interbank Market
Ethan Cohen-Cole (U. Maryland)
 3. Contagion and systemic risk in interbank networks
Rama Cont (Columbia)
 4. Trading Networks
Celso Brunetti (Federal Reserve Board)
- 12:10-1:00 PM **SESSION II: Network Groups and Econometrics**
Chair: *Robin Lumsdaine* (American U)
1. Exponent of Cross-sectional Dependence: Estimation and Inference
Natalia Bailey (Cambridge), George Kapetanios (U. London), **M. Hashem Pesaran** (Cambridge and U. of Southern California)

- 1:00-2:00 PM **LUNCH** (Provided)
- 2:00-3:15 PM **SESSION III: Economic and Decision Networks**
 Chair: *Robert Lerman* (American U and Urban Institute)
1. Linear Social Network Models, Steven N. Durlauf (U. Wisconsin), **Lawrence Blume** (Cornell), William Brock, and Rajshri Jayaraman
 2. Main Street vs. Wall Street: A Comparison of Views
Robin Lumsdaine (American U) and Rogier J.D. Potter van Loon (Erasmus U)
- 3:15-3:30 PM **Coffee Break**
- 3:30-4:30 PM **SESSION IV: Social Networks**
 Chair: *Anil Bera* (U. Illinois)
1. Identification and Estimation of Social Interactions through Variation in Equilibrium Influence **Mikko Packalen** (University of Waterloo)
 2. A Social Interactions Model with Endogenous Friendship Formation and Selectivity **Chih-Sheng Hsieh** and Lung-Fei Lee (Ohio State University)
 3. A Structural Model of Segregation in Social Networks **Angelo Mele** (Johns Hopkins)
 4. The Role of Reciprocation in Social Network Formation, with an Application to Blogging, **Alexia Gaudeul** (Friedrich Schiller University) and **Caterina Giannetti** (University of London)
- 4:30-4:40 PM **Coffee Break**
- 4:40-6:10 PM **SESSION V: Complex and Information Networks**
 Chair: *Aman Ullah* (UC Riverside)
1. Complex Systems and Economics -- A Network Theoretic Approach
Daniel N. Rockmore (Dartmouth)
 Unawareness, Information Theory, and Multiagent Influence Diagrams
David Wolpert (Santa Fe Inst. And Information Sciences Group, Los Alamos National Laboratory)
- 6:15-7:45 PM **Reception**
 (Butler Boardroom)

SATURDAY MARCH 31

(Location: Ward 2)

- 8:00 AM *(Shuttle service provided from Dupont Circle to American University departs The Churchill Hotel no later than 8:10 AM)*
- 8:00-9:00 AM **Coffee-Refreshments**
- 9:00-10:00 AM **SESSION VI: Info-Metrics, Systemic Risk and Finance - II**
Session Organizer – Michael J. Stutzer
Chair: *Michael J. Stutzer* (U. Colorado)
1. Finding diverse and manageable sets of plausible yet severe financial system scenarios
Craig Friedman (S&P)
 2. Credit Default Swaps and Systemic Risk
Andreea Minca (Cornell)
 3. Strategic Behavior and Endogenous Risk of Contagion in a Financial Network: A Network Formation Game
Pallavi Baral (Indiana University)
- 10:05-10:50 AM **SESSION VII: Financial and Social Networks**
Chair: *Dennis Glennon* (OCC)
1. Market Microstructure Implications of Financial Networks
Naomi Boyd (West Virginia University), **Abel Rodriguez** (University of California-Santa Cruz), Brenda Betancourt (University of California-Santa Cruz)
 2. Economic Links and Counterparty Risk: The Network Determinants of Credit Spreads
Daniel Signori (Simon Fraser University) and **Ramazan Gencay** (Simon Fraser University)
 3. Point Process Modeling for Directed Interaction Networks
Patrick Wolfe (University College London, Harvard University)
- 10:50-11:10 AM **Coffee Break**
- 11:10-12:00 PM **SESSION VIII: Complex Information Networks - II**
Chair: *Nathan Harshman* (American U)
1. Mining Heterogeneous Information Networks: Do We Need New Metrics?
Jiawei Han, (U. Illinois at Urbana-Champaign)
- 12:00-1:00 PM **LUNCH** (Provided)

1:00-1:45 PM

SESSION IX: Economic and Financial Networks - Applications

Chair: *Simon Sheng* (American U.)

1. Nonparametric Analysis of Two-Sided Markets
Senay Sokullu (University of Bristol)
2. Endogenous Response to the Interbank Loan 'Network Tax': Stability and Efficiency
José Pedro Figue (Universidade do Porto, Portugal)
3. A Model of Endogenous Extreme Events
Loran Grady Chollete (University of Stavanger)

1:45-3:30 PM

Round Table – Info-Metrics: Information Processing across the Sciences

Moderator: *Robin Lumsdaine* (American U)

Anil Bera (U Illinois)

Duncan K. Foley (New School for Social Research and Santa Fe Inst.)

Nicholas Kiefer (Cornell U)

M. Hashem Pesaran (Cambridge and U. of Southern California)

Michael Stutzer (U Colorado)

3:45 PM

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