

A complex network graph with numerous nodes and edges, rendered in light blue and white against a dark blue background. The nodes are small circles, and the edges are thin lines connecting them, forming a dense, interconnected web.

Fifth Annual Conference on Network Science and Economics

April 26-28, 2019

Organized by the Indiana University Bloomington Department of Economics and the Indiana
University Network Science Institute
Supported by the National Science Foundation

Welcome to Indiana University Bloomington for
the Fifth Annual Conference on Network Science
and Economics

April 26-28, 2019

*We invite you to follow (and post!) on social media with
#nse19.*

Organizing Committee

Arun Chandrasekhar, Stanford University
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Sudipta Sarangi, Virginia Tech

Past Editions

2015: Harvard University
2016: Stanford University
2017: Washington University in St. Louis
2018: Vanderbilt University

Schedule

Friday, April 26, 2019

Community Structures in Networks

9:00-9:50 am **Registration/Light Breakfast - Frangipani Room**

9:50-10:00 am **Welcome & Announcements - Frangipani Room**

10:00-11:10 am *Behavioral Communities and the Atomic Structure of Network*, Matthew O. Jackson and **Evan Storms**

A Theory of Multiplexity: Sustaining Cooperation with Multiple Relationships, **Chen Cheng**, Wei Huang, and Yiqing Xing

11:10-11:40 am **Coffee Break & Open Discussion**

11:40-12:50 pm *Coordination in Networks*, **Matthew Leister**, Yves Zenou, and Junjie Zhou
Games Among Groups, Gabriel Martinez-Roa, **Marzena Rostek**, and Ji Hee Yoon

12:50-2:20 pm **Lunch & Open Discussion**

2:20-3:30 pm *Gender Homophily in Referral Networks: Consequences for the the Medicare Physician Earning Gap*, **Dan Zeltzer**
A Model of Firm Collaborations with Unobserved Heterogeneity, Shweta Gaonkar and **Angelo Mele**

3:30-3:50 pm **Coffee Break & Open Discussion**

3:50-5:00 pm *Measuring Differences in Stochastic Network Structures*, **Eric Auerbach**
Fast Consensus Clustering in Complex Networks, Aditya Tandon and **Santo Fortunato**

5:00 pm Day's official program ends; dinner on your own.

Saturday, April 27, 2019

Parallel Sessions & Poster Session

Session Chair: the last speaker in each session will serve as session chair

8:30- 9:00 am **Coffee & Light Breakfast – Frangipani Room**

Parallel Sessions

9:00-10:20 am **Information Learning and Influence in Networks I – Walnut Room**

- *Anti-Conformism in the Threshold model of Collective Behavior*, Michel Grabisch and **Fen Li**
- *Learning Dynamics in Social Networks*, Simon Board and **Moritz Meyerter-Vehn**
- *News Transmission Through Social Networks*, **Arthur Campbell**, Matthew Leister, and Yves Zenou
- *Influence Campaigns*, **Evan Sadler**

Econometrics and Network Analysis - Maple Room

- *Name Your Friends, but Only Five? The Importance of Censoring in Peer Effects Using Social Network Data*, **Alan Griffith**
- *Effects of Disruptive Peers in Endogenous Social Networks*, Torsten Santavirta and **Miguel Sarzosa**
- ***Cancellation***
- *Global Labor Flow Networks Reveal the Hierarchical Organization and Dynamics of Geo-Industrial Clusters in the World Economy*, **Jaehyuk Park** et al.

10:20-10:40 am **Coffee Break & Open Discussion - Frangipani**

Room 10:40-12:00 pm **Networked Markets I – Walnut Room**

- *Competition in network industries: Evidence from mobile telecommunications in Rwanda*, **Daniel Bjorkegren**
- *Skill Similarity and Economic Success*, **Katharine A. Anderson** and Rebecca Lessem
- *Inequality and Inefficiency due to networked Job Referrals*, **Lukas Bolte**, Nicole Immorlica and Matthew O. Jackson
- *The Role of Managers Revisited*, Parinaz Naghizdeh and **Thanh Nguyen**

Network Formation - Maple Room

- *Nash Equilibria on (Un)Stable Networks*, **Anton Badev**
- *Endogenous Social Networks and Inequality in an Intergenerational Setting*, **Yannis M. Ioannides**
- *Network Formation with Multigraphs and Strategic Complementarities*, Sumit Joshi, Ahmed Saber Mahmud, and **Sudipta Sarangi**
- *Characterising Network Stability When Nodes Are Cognitively Limited*, **Fernando Beltran** and Mengxiao Zhang

12:00-12:10 pm “**Poster Slam**” - **Frangipani Room**

12:10-1:00 pm **Lunch & Open Discussion- State Room East**

1:00-2:00 pm **Poster Session** - **Frangipani Room**

- *Bank-interconnectedness through liquidity flows-a unified monitoring framework*, **Nils A. Bundi**
- *Social Interactions Quantiles*, **Zhongjian Lin**
- *Central Counterparty Default Waterfall and Systemic Loss*, **Simpson Zhang**
- *Social Networks and Consumption Behavior: Evidence from Yelp*, **Hao Teng**
- *The Weakness of Weak Ties in Referrals*, **Shahir Safi**
- *The ties that bind in Academic Publishing*, **Juan Estrada**
- *Competitive Advantage of TPP-Related Nations from an Econophysics Perspective*, **Lizhi Xing**
- *Heterogenous Endogenous Effects in Networks*, **Sida Peng**
- *Development, Transition, and Crisis in the International System: 1870-2009*, **Heather Ba**
- *Non-Bayesian Social Learning and the Spread of Misinformation in Networks*, **Sebastiano Della Lena**
- *Rural Networks and Temporary Migration*, **Vatsal Khandelwal**
- *Cost sharing in Public Goods Game in Networks*, **Prithvijit Mukherjee**
- *Endogenous Institutions: A Network Experiment in Nepal*, **Juni Singh**
- *Attributed-Network CDFs via Copula Model and Sampling Guarantees*, **Pablo Robles**
- *Network Structure of Social Movements: The Power of Online Mobilizing Communities*, **Valentina Kuskova**
- *Policy Actors Identification and Power Evaluation: Insights from the Policy Actors’ Network Structure*, **Dmitry Zaytsev**

2:00-3:20 pm **Financial Networks – Walnut Room**

- *Bailouts and the Doom Loop with an Interbank network*, Agostino Capponi and **Felix Corell**
- *Financial Contagion in Cross-Holding Networks*, **Pablo Estrada** and Leonardo Sanchez-Aragon
- *Collateralized Debt Networks with Lender Default*, **Jin-Wook Chang**
- *What Makes Financial Markets Special? Systemic Risk and its Measurement in Financial Networks*, Matthew O. Jackson and **Agathe Pernoud**

Networks and Applications I - Maple Room

- *Informal Risk Sharing with Local Information*, Attila Ambrus, **Wayne Y. Gao** and Pau Milan
- *Drug Diffusion Through Peer Networks: The influence of Industry Payments*, Leila Agha and **Dan Zeltzer**
- *Leaders in Juvenile Crime*, **Carlos Diaz**, Eleonora Patacchini, Thierry Verdier and Yves Zenou
- *Estimating the gains from liberalizing Services Trade: The case of passenger aviation*, Anca Cristea, David Hummels and **Brian Roberson**

3:20-3:40 pm **Coffee Break & Open Discussion - Frangipani Room**

3:40-5:00 pm **Interventions and Regulation in Networks -Walnut Room**

- *Regulating Financial Networks*, **Carlos Ramirez**
- *Graphon games: A statistical framework for network games and interventions*, **Francesca Parise** and Asuman Ozdaglar
- *Structural Interventions of Social Ties*, **Yang Sun**, Wei Zhao, and Junjie Zhou
- *Targeting Interventions in Networks*, **Ben Golub**, Andrea Galeotti, and Sanjeev Goyal

Network Analysis and Experiments- Maple Room

- *Complex Interdependence as a Network Phenomenon: The Case of Trade*, Elizabeth J. Menninga and **W. Kindred Winecoff**
- *Patterning and Re-Patterning the Social Networks of Nashville Songwriters*, **Rachel Skaggs**
- *An Experimental Study of Common Knowledge on Social Networks*, **Gizem Korkmaz** et al.,
- *Social and Economic Inequality*, Margherita Comola, Edoardo Gallo and **Luca P. Merlino**

6:30-9:00 pm **Dinner at IMU Frangipani Room**

Sunday, April 28, 2019

Parallel Sessions

Session Chair: the last speaker in each session will serve as session chair

8:30-9:00 am **Coffee & Light Breakfast - Frangipani Room**

9:00-10:20 am **Strategic Interaction in Networks - Walnut Room**

- *Who matters in Coordination Problems on Networks: Myopic or Farsighted Agents?*, Ana Mauleon, **Simon Schopohl**, Akylai Taalaibekova and Vincent Vannetelbosch
- *Sign Equivalent Transformations and Network Games*, Yves Zenou and **Junjie Zhou**
- *Social Norms in Networks*, **Philip Uschev** and Yves Zenou
- *Learning and Self-Confirming Equilibrium in Network Games*, Pierpaolo Battigalli, Fabrizio Panebianco, and **Paolo Pin**

Networked Markets II – Maple Room

- *Optimal Commissions and Subscriptions in Networked Markets*, John Birge, **Ozan Candogan**, Hongfan Chen and Daniela Saban
- *Pricing in Networks with Anonymized Information*, Francis Bloch and **Shaden Shabayek**
- *Price Updating with Production Network*, Cedric Duprez and **Glenn Magerman**
- *Screening with Network Externalities*, Fanqi Shi and **Yiqing Xing**

10:20-10:40 am **Coffee Break & Open Discussion - Frangipani Room**

10:40-12:00 pm **Information, Learning, and influence in Networks II- Walnut Room**

- *The Role of Contextualization in Social Learning*, **Stephen Nei**
- *Learning through the Grapevine: The Impact of Message Mutation, Transmission Failure, and Deliberate Bias*, Matthew O. Jackson, **Suraj Malladi** and David McAdams
- *Reputation and Manipulation in Social Networks*, **James Siderius**, Mohamed Mostagir and Asu Ozdaglar
- *Opinion Manipulation and Disagreement in Social Networks*, **Geyu Yang**

Networks and Applications II – Maple Room

- *On the Influence of Top Journals*, Lorenzo Ductor, Sanjeev Goyal, **Marco van der Leij** and Gustavo Nicolas Paez
- *Trading Networks and the “Death Effect” on Artwork Prices*, **Robert Press**, Dakshina DeSilva, Georgia Kosmopoulou and Rachel Pownall
- *Civil Liberties and Social Structure*, **Selman Erol** and Camilo Garcia-Jimeno
- *A Rational Model of Information Dissemination*, **Chin-Chia Hsu**, Amir Ajorlou, and Ali Jadbabaie

Adjourn

We appreciate the generous support for this conference from the Center for Applied Economics and Policy Research (CAEPR) at Indiana University Bloomington, the Indiana University Network Science Institute (IUNI), and the Indiana University College of Arts and Sciences.



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