

CompleNet'18 Poster Titles

Poster Session A

Tuesday, March 6th, 6:00-8:00 pm

Fenway Center

- A1. The laws of forgetting I: Temporal scales in human collective forgetting
Cristian Candia-Castro-Vallejos, Cristian Jara-Figueroa, Carlos Rodriguez-Sickert, Albert-László Barabási & Cesar Hidalgo
- A2. The laws of forgetting II: How death and exogenous events shape our collective memory
Cristian Candia-Castro-Vallejos, Cristian Jara-Figueroa, Carlos Rodriguez-Sickert and Cesar Hidalgo
- A3. Opinion model for distributed anomaly detection
Gonzalo Suárez, Lazaros Gallos and Shlomo Havlin
- A4. The Structure of Cattle Trade Movements in Brazil
Denis Cardoso, David Elliott, Christiane Rocha, Josemar Faustino Da Cruz and Ronaldo Menezes
- A5. Co-evolution of Cognition and Cooperation on (Social) Networks
Mohsen Mosleh and David Rand
- ~~A6. Long Short Memory Process: Modeling Growth Dynamics of Microscopic Social Connectivity
Chengxi Zang, Peng Cui, Christos Faloutsos and Wenwu Zhu~~
- A7. Are crisis platforms supporting citizen participation?
Gonzalo Bacigalupe and Javier Velasco
- A8. Model Explorer - software for visual inspection of genome-scale metabolic models
Nikolay Martyushenko and Eivind Almaas
- A9. A Network-Based Classification Framework for Predicting Treatment Response of Schizophrenia Patients
Farnaz Zamani Esfahlani, Katherine Visser, Gregory Strauss and Hiroki Sayama
- A10. Assessing reliable human mobility patterns from higher order memory in mobile communications
Joan Matamalas, Manlio de Domenico and Alex Arenas
- A11. Complex Networks Reveal a Glottochronological Classification of Natural Languages
Harith Hamoodat, Younis Al Rozz and Ronaldo Menezes
- A12. Mapping the Higher Education System: The Applicants Perspective
Cristian Candia-Castro-Vallejos, Sara Encarnação, Carlos Rodriguez Sickert, César Hidalgo and Flavio Pinheiro
- A13. Follow the money: defining node sequences on weighted and directed temporal networks
Carolina Mattsson
- A14. Predicting perturbation patterns from the topology of biological networks
Marc Santolini and Albert-László Barabási
- A15. Structural and Functional Redundancy in Biological Networks
Alice Schwarze, Mason A Porter and Jonny Wray
- A16. Network of Bicycle Sharing System demands in Medellin: An alternative for urban sustainable mobility
Laura Lotero and Alejandro Builes-Jaramillo
- ~~A17. Model assisted design of experiments in the presence of network correlated outcomes
Guillaume Basse and Edoardo Airoldi~~
- ~~A18. Neural Detection of Socially Valued Community Members
Sylvia A. Morelli, Yuan C. Leong, Ryan W. Carlson, Monica Kullar and Jamil Zaki~~
- A19. Recommendation in Call Detail Record Networks
Steven Mudda, Matteo Zignani, Sabrina Gaito, Silvia Giordano and Gian Paolo Rossi
- A20. A Social Influence Model Based on Affiliation: A Case Study in a Multi-Party Political System

- Josemar Faustino, Hugo Barbosa, Fernando Buarque de Lima-Neto, Eraldo Ribeiro and Ronaldo Menezes*
- A21. Dynamic Visualization of Citation Networks and Detection of Influential Node Addition
Takayasu Fushimi, Tetsuji Satoh and Noriko Kando
- A22. Classical Music Clustering Based on Acoustic Features Using Networks
Xindi Wang and Syed Haque
- ~~A23. How can we use the complex networks to determine the ancient cultures?
Jelena Grujic and Miljana Radivojevic~~
- A24. Using Collective Intelligence to Mitigate Motivated Reasoning in Climate Change Communications
Douglas Guilbeault, Joshua Becker and Damon Centola
- ~~A25. Temporal communication patterns within cohesive groups gathering in urban spaces
Matteo Zignani, Christian Quadri, Michela Del Vicario, Sabrina Gaito and Gian Paolo Rossi~~
- A26. Author Attribution using Network Motifs
Younis Al Rozz and Ronaldo Menezes
- ~~A27. Social Emotional Competence in Children Correlates with Centrality and Embeddedness in Classrooms
M. Mowafak Allaham, Teresa Borowski, Sylvia Morelli and Clark McKown~~
- A28. Estimating peer influence effects under homophily: randomised treatments and insights
Niloy Biswas and Edoardo Airoidi
- A29. Homophily explains perception biases in social networks
Eun Lee, Fariba Karimi, Hang-Hyun Jo, Markus Strohmaier and Claudia Wagner
- A30. Speciation Results from Gene Regulatory Network Evolution
Chia-Hung Yang and Samuel Scarpino
- A31. A trust based news spreading model
Alessandro Longheu, Vincenza Carchiolo, Giuseppe Mangioni, Michele Malgeri and Marialaura Previti
- A32. Anomalous popularity growth in social tagging dynamics
Yasuhiro Hashimoto, Mizuki Oka and Takashi Ikegami
- A33. Unveiling the Cultural Space of Brazil
Diego Pinheiro, Josemar Faustino, Diogo Pacheco, Marcos Oliveira, Ronaldo Menezes and Henilton Menezes
- A34. Cultivating Tipping Points: Network Science in Teaching
Catherine Cramer, Raluca Gera, Michaela Labriole, Hiroki Sayama, Lori Sheetz, Emma Towlson and Stephen Uzzo
- A35. Emerging of inequality in financial transactions data
Marcella Tambuscio, Alfonso Semeraro, Silvia Ronchiadin and Giancarlo Ruffo
- A36. Temporal social networks within Recreovia users: measuring cohesion emerging from a physical activity program in Bogota, Colombia
Ana Maria Jaramillo, Felipe Montes, Ana Paola Rios Cabra, Olga L. Sarmiento and Ruth Hunter
- A37. Does classroom cooperation promote learning? Mapping classroom cooperation networks with games and its connection with academic performance
Victor Landaeta-Torres, Cristian Candia-Castro-Vallejos, Jorge Fábrega, Camilo Rodríguez-Beltrán, Jorge Varela, Carlos Rodriguez-Sickert and César Hidalgo
- A38. Channel Alteration and Structural Efficiency in Human Communication Networks
Kyosuke Tanaka and Emok-Agnes Horvat
- A39. Detecting seasonal migrations with mobile phone data
Samuel Martin-Gutierrez, Javier Borondo, Juan Carlos Losada, Alfredo Morales, Ana Maria Tarquis and Rosa M Benito
- A40. Opening the relatedness box: comparing industry-specific, occupation-specific, and general human capital
Cristian Jara Figueroa, Edward Glaeser, Bogang Jun and César Hidalgo

- A41. The Network of Negative Ties Between Good Bots
Taha Yasseri
- A42. Epistemic Assortativity in Scientific Collaboration Networks
Ignacio Toledo and Jorge Fabrega

Poster Session B

Wednesday, March 7th, 12:30-2:30 pm
Curry Student Center Ballroom

- B1. Outer synchronization for general weighted complex dynamical networks considering incomplete measurements of transmitted information
Xinwei Wang, Guo-Ping Jiang and Xu Wu
- B2. SBM is discrete surface tension
Zachary Boyd
- B3. Connectivity maintenance and community efficiency in networks.
Thais Uzun and Carlos Ribeiro
- B4. The routes and clustering features of PM2.5 spillovers within the Jing-jin-ji cities under multi-timescales: Based on complex network methods
Huajiao Li, Haizhong An, Chao Li, Xueyong Liu and Yajie Qi
- B5. Accessibility and delay in random spatiotemporal networks
Shahriar Etemadi Tajbakhsh and Justin Coon
- ~~B6. Temporal organization of avalanches in neuronal networks
Fabrizio Lombardi, Hans Herrmann, Lucilla de Arcangelis and Dietmar Plenz~~
- ~~B7. An R package for calculating the Weighted Topological Overlap Network with a visualization tool
Deisy Morselli Gysi, Andre Voigt, Tiago Miranda Fragoso, Eivind Almaas and Katja Nowick~~
- B8. Mitigating Strategic Network Attack Diffusion in Security Games
Marcin Waniek and Aamena Alshamsi
- B9. Cross-border Banking Crises: A Multilayer Network Perspective
Oscar Granados
- B10. Preventive Defense of Cascade Failures in Complex Networks
Akito Igarashi and Shingo Kameyama
- B11. Combinatorial Miller-Hagberg Algorithm for Randomization of Dense Networks
Hiroki Sayama
- B12. Embedding-Centrality: generic centrality computation using neural networks
Rami Puzis, Zion Sofer, Dvir Cohen and Matan Hugi
- B13. Discovering Patterns of Interest in IP Traffic Using Cliques in Bipartite Link Streams
Tiphaine Viard, Raphael Fournier-S'Niehotta, Matthieu Latapy and Clemence Magnien
- B14. Network Dynamics of MicroRNA Co-Expression During Innate Immune System Responses
Benjamin King, Con Sullivan and Carol Kim
- B15. Spin Model on Network for Macro-Prudential Analysis
Yuichi Ikeda, Yoshiyuki Arata and Hiroshi Yoshikawa
- B16. Precipitation Networks in Tropical River Basins: Amazon and Congo
Alejandro Builes-Jaramillo and Laura Lotero
- B17. Epidemic spreading in localized environments with recurrent mobility patterns
Clara Granell and Peter Mucha
- B18. A Study of Cycle Length Distributions: Asymptotics, Applications, and Links to Homotopy Theory
Leonardo Torres and Tina Eliassi-Rad
- B19. Density decompositions of networks
Glencora Borradaile, Theresa Migler-Vondollen and Gordon Wilfong
- B20. Trade-offs between robustness and small-world effect in complex networks

- Jun Wu, Ye Deng, Yue-Jin Tan and Zhiwei Yang*
- B21. Diffusive Phenomena in Dynamic Networks: a data-driven study
Letizia Milli, Giulio Rossetti, Dino Pedreschi and Fosca Giannotti
- B22. Local Edge Perturbations as a Metric for Community Persistence
Brennan Klein and Stefan McCabe
- B23. Balancing transaction surpluses in two-sided platforms by controlling network information transparency
Pouria Babvey and Babak Heydari
- B24. Network Approach to Understanding Cascading Financial Crises
Irena Vodenska and Yohei Sakamoto
- B25. Optimal knowledge diffusion strategies in the networks of related products and of related research areas
Aamena Alshamsi, Flavio L Pinheiro and Cesar Hidalgo
- ~~B26. The local efficiency of urban street networks
Minjin Lee, Petter Holme and Lee Sungmin~~
- B27. Dynamic Scaling, Data-collapse and Self-Similarity in Mediation-Driven Attachment Networks
Liana Islam and Md Kamrul Hassan
- B28. Fast Sequence Based Embedding with Diffusion Graphs
Benedek Rozemberczki and Rik Sarkar
- B29. Fractal analyses of networks of integrate-and-fire stochastic spiking neurons
Ariadne A. Costa, Mary Jean Amon, Olaf Sporns and Luis H. Favela
- B30. On the Eccentricity Function in Graphs
Hend Alrasheed
- ~~B31. Leveraging Message Passing to Highlight Consistent Structures and Identify Network Communities
Abhijeet Sonawane and Kimberly Glass~~
- ~~B32. A systems approach to refine disease taxonomy by integrating phenotypic and molecular networks
Xuezhong Zhou, Arda Halu, Joseph Loscalzo and Amitabh Sharma~~
- B33. Improving Core Resilience of Network under Random Edge Deletion
Ricky Laishram, Sucheta Soundarajan, Tina Eliassi Rad, Ahmet Erdem Sariyuce and Ali Pinar
- B34. Understanding how the human mobility network shapes the global invasion pattern of pandemic influenza: a network-based approach
Kaiyuan Sun, Dina Mistry, Ana Pastore Y Piontti, Luca Rossi, Marcelo Ferreira Da Costa Gomes and Alessandro Vespignani
- B35. Deliberation as Collaborative Search Through Belief Space
Sarah Shugars
- B36. Rank Aggregation for Determining Importance of Nodes in Complex Networks
Igor Zakhlebin and Eموke-Agnes Horvat
- B37. Proposal of Strategic Link Addition for Improving the Robustness of Multiplex Networks
Yui Kazawa and Sho Tsugawa
- B38. Terrorist Network Analyzed with an Influence Spreading Model
Vesa Kuikka
- B39. Robust Network Connectivity: A Percolation Study
Arman Mohseni-Kabir, Mihir Pant, Don Towsley, Saikat Guha, Paul Yu and Ananthram Swami
- ~~B40. Target Control of Boolean Network Models using Domain of Influence of nodes
Gang Yang and Réka Albert~~
- ~~B41. Maxmin Omega: Deterministic Asynchrony on Networks
Ebrahim Patel~~
- B42. Silhouette for the Evaluation of Community Structures in Multiplex Networks
Alessia Amelio and Andrea Tagarelli

- B43. Propagation of Negative Shocks through Firm Networks: Evidence from Simulation on Nationwide Supply-Chain Data
Hiroyasu Inoue and Yasuyuki Todo
- B44. Dynamics and Topology of Zika Virus Epidemics
Daniel Goldsmith, Joshua Blau and Marian Gidea
- B45. Using Arborescences to Estimate Hierarchicalness in Directed Complex Networks
Michele Coscia
- B46. Degree correlation induced bimodality in controlling complex networks
Tao Jia, Yongqing Liang and Rui Zhang
- B47. Semi-supervised Graph Embedding Approach to Dynamic Link Prediction
Ryohei Hisano
- B48. Jaccard curvature – An efficient proxy for Ollivier-Ricci curvature in graphs
Siddharth Pal, Feng Yu, Terrence Moore, Ram Ramanathan, Amotz Bar-Noy and Ananthram Swami
- B49. Information Diffusion Pattern among Shareholders Considering Indirect Tunnels Revealed by Link Prediction
Qing Guan, Haizhong An, Xiaoqi Sun, Xueyong Liu and Feng An
- ~~B50. Evolution through bursts: Network structure develops through localized bursts in time and space
Hilla Brot, Lev Muchnik, Jacob Goldenberg and Yoram Louzoun~~
- B51. A Weighted Link Removal Model to Simulate an Environmental “Attack” on a Coral Reef Mutualism Network
Sara Williams
- B52. Network Backboning with Noisy Data
Michele Coscia and Frank Neffke
- B53. Using a structural approach to link network, dynamics and perturbations
Simone Cenci, Chuliang Song and Serguei Saavedra
- B54. Network Classification and Categorization
Karl Schmitt, James Canning, Emma Ingram, Adriana Ortiz-Aquino, Nesreen Ahmed, Ryan Rossi, Samantha Nowak-Wolff and Sucheta Soundarajan
- B55. Module detection on functional brain networks during development using resting-state fMRI
Rodrigo Pineda, Nadia Gonzalez and Pablo Padilla
- B56. Causal Emergence in Complex Networks
Brennan Klein and Erik Hoel
- B57. Weighted openness coefficient as a measure of creative potential
Balazs Vedres
- B58. The Geography of Transnational Institutional Work Networks
Kristjan Jespersen, Caleb Gallemore, Arno Kourula and Roy Suddaby
- B59. Competing dynamical processes on two interacting networks
Lucila Gisele Alvarez-Zuzek, Cristian E La Rocca, Federico Vazquez and Lidia A. Braunstein
- B60. Optimal disintegration strategy based on tabu search in directed networks
Yang Yu, Ye Deng, Jun Wu, Zhiwei Yang and Yuejin Tan
- B61. Social Influence (Deep) Learning for Human Behavior Prediction
Luca Luceri, Torsten Braun and Silvia Giordano
- B62. Graphical Object-Oriented Data Analysis for Analyzing Sets of Graphs
William Shannon
- ~~B63. Brain classification using entropy measure
Jesús Antonio Jiménez, Nadia González García and Pablo Padilla Longori~~
- B64. Fast streaming small graph canonization
Pedro Paredes and Pedro Ribeiro
- B65. Modular decomposition of protein structure using community detection
William Grant and Sebastian Ahnert

- B66. Does It Really Matter Where You Go to College? A Network-Based Analysis of Educational Outcomes of Universities in the United States
Ewa Sulicz and Juwairiyah Shaikh
- B67. How Will the Transfer of Using Alternatives to Fossil Fuels Affect Trade Networks and Economic Interconnectedness?
Chris Vincens and Danyal Shah
- B68. Music Intervals Conecting Music of Different Culture
Harrison Barnes and Joyce Zhu