

TUESDAY 17th Feb	
School morning session 1	
9:00-10:15	Meso-scale organization of networks: theory and applications (1/2) – Eduardo Altman
School morning session 2	
10:45-12:00	Meso-scale organization of networks: theory and applications (2/2) – Eduardo Altman
School afternoon session 1	
1:15-2:30	Ecological Networks: from data reconstruction to dynamical insights – Kate Wootton and Anshuman Swain
School afternoon session 2	
2:30-3:45	Gentle Introduction to Deep Graph Learning for Network Scientists – Ingo Sholtes
School afternoon session 3	
4:15-5:30	Indigenous Data Sovereignty – Daniel Wilson
Social session 1	
5:30-late	Welcome reception

WEDNESDAY 18th Feb						
Keynote 1						
9:00-10:00		Tina Eliassi-Rad				
Parallel 1		Stream 1		Stream 2	Stream 3	Stream 4
10:30 - 12:30	Start time	Graph Neural Networks and Generative Graph Models		Network Control, Synchronization, and Interventions	Social and Behavioral Networks	Higher-Order Networks and Hypergraphs (I)
MORNING	10:30	Deep Graph Generation for Microcanonical Graph Ensemble. Hoyun Choi, Deok-Sun Lee		Fibration symmetry-breaking supports functional transitions in a brain network engaged in language. Tommaso Gili	Navigating Danger: Behavioral Spreading and Misinformation Suppression in Coral Reef Fish. Sara Linde Neven	Loops, not groups: Long loops are responsible for discontinuous phase transitions in higher-order network contagions. Leah A. Keating, Laurent Hébert-Dufresne
	10:45	Efficient "Neural" Community Detection in Attributed Graphs with a Temporal Modularity Loss Function. Nelson Aloysio Reis de Almeida Passos		Multiscale Organization of the Human Connectome via Laplacian Renormalization. Gabriele Poidomani, Pablo Villegas, Tommaso Gili	Political Information Dissemination by Domestic Political Actors in Pakistan. Hassan Mustafa	Higher-order interactions accelerate cultural recombination. Onkar Sadekar, Lucio Vinicius, Andrea Migliano, Vito Latora, Federico Battiston
	11:00	Multiscale Network Renormalization. Diego Garlaschelli		Distinct Synchronization Profile of the Gate Node in a Modular Power Grid. Jonghoon Kim, Cook Hyun Kim, Heetae Kim	How Social Ties Mobilize and Polarize: Social Network Determinants of Election Outcomes. Yuliia Kazmina	Cooperation in social dilemmas on higher-order networks. Onkar Sadekar, Andrea Civilini, Federico Battiston, Jesus Gomez-Gardenes, Vito Latora
	11:15	Characterizing the dynamics of unlabelled temporal network trajectories. Annalisa Caligiuri, Tobias Galla, Lucas Lacasa		Selecting controlled edges in edge-based pinning control synchronization. Siyang Jiang	Social compensation strategies in response to individual loss in natural populations. Eloise F. Newman, Adelaide Daisy Abraham, Josh A Firth	Discovering Higher-Order Interactions in Hypergraphs via Projections: Concepts & Algorithms. Elise Tate, Joshua Grochow
	11:30	Graph Theory Signatures of Seizure Susceptibility in scn1lab/- Zebrafish Network. Wei Qin, Ethan Scott		Hierarchical structure of redundancy and synergy in brain networks across goal-directed learning. Leonardo Di Gaetano, Alain Barrat, Andrea Brovelli	Social network heterogeneity promotes depolarization of multidimensional opinions. Jaume Ojer, Michele Starnini, romualdo pastor satorras	SIRS processes competing on simplicial complexes. Haiying Wang, Lina Zhao, Huijie Yang, Changgui Gu, Jack Murdoch Moore
	11:45	Enhancing Graph Neural Networks with Random Graph Ensembles. Jan von Pichowski, Vincenzo Perri, Ingo Scholtes		Oscillatory adaptive networks in cognition-like processes: from slime moulds to brain organoids. Linnea Gyllingberg	Using Temporal Collaboration Networks to Understand Activity Cascades in OSS Communities. Lisi Qarkashija, Ingo Scholtes	Symbolic Higher-Order Analysis of Multivariate Time Series. Andrea Civilini, Fabrizio de Vico Fallani, Vito Latora
	12:00	Using Temporal Graph Isomorphism to Understand the Expressivity of Temporal Graph Neural Networks.				

		Franziska Heeg, Jonas Sauer, Petra Mutzel, Ingo Scholtes			
	12:15	Quantum Preferential Attachment. Istvan A. Kovacs			
Keynote 2					
2:45-3:45		Lewis Mitchell			
Parallel 2		Stream 1	Stream 2	Stream 3	Stream 4
14:15 - 15:45	Start time	Mobility, Accessibility, and Urban Networks	Culture, Knowledge, and Online Information	Community Structure, Fairness, and Governance	Higher-Order Networks and Hypergraphs (II)
AFTERNOON	14:15	Impact of network structures on emergency services - Examples from Germany. Melanie Reuter-Oppermann	Cultural Evolution of Human Beauty Standards. Louis Boucherie, Karolina Sliwa, August Lohse, Sagar Kumar, Katharina Ledebur	Beyond NMI: Reliable Community Detection Evaluation Using Kappa Index and F-Score. Xin Liu, Huimin Cheng, Zhong-Yuan Zhang	Phase transitions in the simplicial Ising model on hypergraphs. Gangmin Son, Deok-Sun Lee, KWANG-IL GOH
	14:30	Analysis of Robustness and Efficiency of the Transport Network in Downtown Mexico City using a directed graph theory approach. Identification of key urban nodes. Luis Agustin Olivares Quiroz	How Collective Memory Gets Forgotten: The Origins of Relaxation Speed in Social Video Sharing Platform. Kiminori Ito	Individual Fairness in Community Detection: Metrics and Insights. Fabrizio Corriera, Frank W. Takes, Akrati Saxena	Disentangling the role of heterogeneity and hyperedge overlap in explosive contagion on higher-order networks. Federico Malizia, Andrés Guzman, Iacopo Iacopini, István Z. Kiss
	14:45	Women mobility networks enable more efficient travel. Silvia De Sojo, Sune Lehmann, Laura Maria Alessandretti	The dichotomy of knowledge: Evolutionary dynamics with game transitions on social networks. Amit Basak, Supratim Sengupta, Maria Kleshnina	Local epidemic thresholds on networks: community-specific risk from mobility-driven interactions. Eugenio Valdano, boxuan wang	Global Supply Chain Resilience and Geopolitical Uncertainty. Xinyi Zhao, Prasanna Gai, Chanelle Duley
	15:00	ATGreen(GO): A multi-dimensional framework to measure accessibility and promote exposure to urban green. Rossano Schifanella, Alice Battiston	Who Gets the Blame? A Structural Theory of Scapegoating in Social Networks. Qinyang Yu	Bipartite Patent Networks Reveal Hidden Diversity in Innovation: Communities, Market Structure, and Fitness. Complexity. FEI WANG	Weak higher-order interactions enhance synchronization: a study on the Kuramoto model - Contributed Talk. Riccardo Muolo, Hiroya Nakao, Marco Coraggio
	15:15	Mixture models uncover polycentric urban structure from mobility networks. Andrew Renninger	Proximity and genetic networks shape the evolution of cumulative culture. Onkar Sadekar, Cassandra Gunasekaram, Federico Battiston, Lucio Vinicius, Andrea Migliano	Synchronisation Detection Using Spatial Ordinal Partitions in Networks. Zahra Shahriari, David M. Walker, Shannon D. Algar, Michael Small	Pairwise approximations of simplicial contagion models on hypergraphs. Eugene Tan

	15:30	Exploring Pedestrian Permeability in Urban Sidewalk Networks. Albert Sole-Ribalta, Javier Borge-Holthoefer, Robert Benassai-Dalmau	Mapping emergent knowledge in Wikipedia through complex networks. Gustavo A. Schwartz	Unmasking Covert Control in Global Corporate Governance. Takayuki Mizuno, Shuhei Kurizaki	Multi-Order Hypergraph Stochastic Block Model. Kazuki Nakajima, Yuya Sasaki, Takeaki Uno, Masaki Aida
Short talks plenary 1					
4:15-5:30		Spotlight talks			
Social session 2					
5:30-7:30		Poster session and reception			

THURSDAY 19th Feb					
Keynote 3					
9:00-10:00		Rio Sun			
Thematic sessions 1		Stream 1	Stream 2	Stream 3	Stream 4
10:30 - 12:00	Start time	Discrete network models in biology	Networks in Science of Science	The Scales of Movement (1/2)	
MORNING		TBA	TBA	TBA	
Thematic sessions 2		Stream 1	Stream 2	Stream 3	Stream 4
1:15-2:45	Start time	Algorithmic Fairness in Network Science		The scales of Movement (2/2)	
AFTERNOON		TBA		TBA	
Keynote 4					
2:45-3:45		Yukie Sano			
Short talks plenary 2					
4:15-5:30		Lightning Talks			
Social session 3					
7:00-late		Conference dinner at the Hilton			

FRIDAY 20th Feb						
Keynote 5						
10:00-11:00		Clare Postlethwaite				
Parallel 3		Stream 1	Stream 2	Stream 3	Stream 4	
11:00 - 12:00	Start time	Multilayer Social Networks: Perception, Fairness, and Influence	Optimal Transport, Embeddings, and Network Inference	Health and Biological Networks	Network Applications: Science, Signed Networks, and Sport	
MORNING	11:00	Estimating latent structure in perceptions of social networks with multilayer Aggregated Relational Data. Izabel Pirimai Aguiar	Cost and preferences in bipartite complex systems: inverting the (sub-)optimal transport problem. Dario Mazzilli	Robust Basins, Fragile Attractors: A New View on Biological Network Dynamics. Claus Kadelka, Venkata Sai Narayana Bavisetty, Matthew Wheeler	Network Dynamics of Scientific Fields: Centralization and Stability in Conceptual and Citation Structures. Csaba Kiss, Dr. Roland Molontay	
	11:15	DQ4FairIM: Fairness-aware Influence Maximization using Deep Reinforcement Learning. Akrati Saxena, E Harshith Kumar Yadav, Shashi Shekhar Jha	Hyperbolic Embedding of Multilayer Networks. Mario Chavez	Association between oral microbiota and close-range proximity of children in primary school. Lorenzo Dall'Amico, Xiangning Bai, Sandra Marie Weltzien, Simon Rayner, Daniela Paolotti, Isabelle Sylvie Budin Ljungström, Andreas Matussek, Anne-Sofie Furberg, Ciro Cattuto, Christopher Sivert Nielsen	Meso-scale Structures in Signed Networks. Wei Zhang, Olga Boichak, Tristram Alexander, Tiago P. Peixoto, Eduardo Altmann	
	11:30	Fairness-Aware PageRank Approximation. Mukesh Kumar, Gaurav Dixit, Akrati Saxena	Estimation, Experimental Design, and Optimal Policy when Facing Partial Network Data from a Single Network. Tyler McCormick	Cell Interrupted - Modeling Epithelial to Mesenchymal Transition vs. Mitochondrial Dysfunction-Associated Senescence Tug of War. Erzsebet Ravasz Regan	A Multiplex Lens on Influencer Performance, Group Synergy, and Network Centralization Keywords: Multiplex Networks, Team Performance, Group Synergy, Motivation, Influence. Megan Alexis Chan, Shraeya Iyer, Isabel Su, Jeffrey Tu, Noshir Contractor	
	11:45	Applicability of the Minimal Dominating Set for Influence Maximisation in Multilayer Networks. Michał Czuba, Mingshan Jia, Katarzyna Musial-Gabrys, Piotr Brzozka		Nested Networks in Health: Linking Microbiomes and Interspecies Contact to Address Cross-Scale Complexity. David T S Hayman	Explaining the Game: Network Science in Soccer. Javier M. Buldú	
Parallel 4		Stream 1	Stream 2	Stream 3	Stream 4	
14:15 - 15:45	Start time	Finance, Trade, and Systemic Risk Networks	Network Theory and Measures	Dynamics on Networks Across Domains		

AFTERNOON	14:15	Filtering amplitude dependence of correlation dynamics in the cryptocurrency market. Marcin Wątorek, Jarosław Kwapienie, Stanisław Drożdż	Learning by Surprise: Surplexity for Mitigating Model Collapse in Generative AI. Daniele Gambetta, Gizem Gezici, Fosca Giannotti, Dino Pedreschi, Alistair Knott, Luca Pappalardo	Quantifying Influence of Network Structure on Opinion Dynamics. Yu Xing	
	14:30	Temporal Motif Structures in Japanese Corporate Shareholding Networks. Shinichiro Tanabe, Takaaki Ohnishi	Enhanced Robustness of Evolving Open Systems by Bipartite Network Topology. Fumiko Ogushi, Kimmo Kaski, Takashi Shimada	Extending Earthquake Network Models with a Magnitude-Based Time-Window Approach. Jennifer Ribeiro Silv@rio da Concei@o, Douglas Santos Rodrigues Ferreira	
	14:45	Complementary network models to assess social-ecological fit: A case of flood planning in the Wolastoq. Bridget McGlynn, Angela Guerrero Gonzalez, Julia Baird, @rjan Bodin, Ryan Plummer	Similarity and complementarity in generalized random geometric graphs. Szymon Talaga, Brennan Klein	Balancing Stability and Complexity in Boolean Models of Biological Networks. Venkata Sai Narayana Bavisetty, Matthew Wheeler, Claus Kadelka, Reinhard Laubenbacher	
	15:00	Information Processing Pathways in the Stock Markets. Kang Zheng Tien, Peter Yen Tsung-Wen, Siew Ann Cheong, Tiziana Di Matteo, Kelin Xia	Extension of shortest path based Betweenness centrality to the multicriteria case. Andrea Raith, Clara Sim@n De Blas, Daniel Gomez	A network analysis of collective motions in a three-species Vicsek model. Seung-Woo Son	
	15:15	US and EU Aid and Trade, and the Relationships with Human and Environmental Crises. Rosie Hayward, Peter Klimek, Asjad Naqvi	The ultrametric backbone is the union of all minimum spanning forests. Luis M Rocha, Jordan C. Rozum	Structural dynamics of plant-pollinator mutualistic networks. Albert Sole-Ribalta, Aniello Lampo, Javier Borge-Holthoefer, Mar@a J. Palazzi	
	15:30	Network Security under Heterogeneous Cyber-Risk Profiles and Contagion. Elisa Botteghi, Martino Centonze, Davide Pastorello, Daniele Tantari	First return processes of non-backtracking random walks on random networks. Ofer Biham, Dor Lev-Ari, Ido Tishby, Eytan Katzav, Diego Krupp	Influence of networked partisans on perceptions of media bias. Yutong Bu, Andrew Melatos	