COMPLENET 2018 SCHEDULE

Conference Locations

* Main Conference: East Village, 17th Floor, 291 St. Botolph Street
* Art of Networks Reception: Network Science Institute, 177 Huntington Ave, Lobby
* Poster Session I: Fenway Center, 77 St Stephen St

* Poster Session II: Curry Student Center Ballroom, 346 Huntington Ave
* Caucus for Women in Network Science: Network Science Institute, 177 Huntington Ave, 10th FL
* Society for Young Network Scientists: Network Science Institute, 177 Huntington Ave, 2nd FL

Location key: **EV** = East Village | **NS** = Network Science Institute | **FC** = Fenway Center | **CC** = Curry Student Center | * = On your own

Sunday, March 4th

5:00 pm — 8:00 pm	Symposium of Young Network Scientists: Paper Unwind [Location: Network Science Institute, 2nd floor]	NS

Monday, March 5th

8:30 am — 9:00 am	Registration & Breakfast	EV
9:00 am — 9:15 am	Opening Remarks	
9:15 am — 10:00 am	**KEYNOTE:** David Lazer, *The Prevalence and Dissemination of Fake News*	
	SOCIAL NETWORKS I	
10:00 am — 11:00 am	Giovanna Miritello, Manuel Cebrián, César Hidalgo & Esteban Moro Egido, *Tie strength precedes social embededdness*	EV
	John Ternovski & Taha Yasseri, *Social influence in music listenership: A natural experiment on 1.3 million Last.fm users*	
	Stefano Balietti, Brennan Klein & Christoph Riedl, *Toward the optimal design of social network experiments*	
	Talayeh Aledavood, Sune Lehmann & Jari Saramäki, *Social network differences of chronotypes identified from mobile phone data*	
	Marc Santolini, Abhijeet Krishna, Leo Blondel, Thomas Landrain & Albert-László Barabási, *Predicting team success in the iGEM scientific competition*	
11:00 am — 11:30 am	Coffee break	EV
	BIOLOGICAL NETWORKS I	
11:30 am — 12:30 pm	Megha Padi & John Quackenbush, *Detecting phenotype-driven transitions in regulatory network structure*	EV
	Vrushali Dipak Fangal, Enrico Maiorino & Amitabh Sharma, *MIDAS : autoMatIc translation of MechanistIc rules to DynAmic logic RuleS for modeling biological networks*	
	Xiao Gan & Réka Albert, *A general method to find the attractors of discrete dynamic models of biological systems*	
	Chuliang Song, Rudolf P. Rohr & Serguei Saavedra, *A guideline to study the feasibility of multi-trophic and changing ecological communities*	
	Istvan Kovacs & Albert-László Barabási, *Network-based prediction of biological interactions*	
12:30 pm — 2:00 pm	Lunch	*
2:00 pm — 2:30 pm	**INVITED TALK:** Yelena Mejova, *Capturing Digital Signals for Lifestyle Health Research*	EV
2:30 pm — 3:00 pm	**INVITED TALK:** Kayla de la Haye, *The social contagion of obesity: Understanding mechanisms, developing network interventions*	
	NETWORK THEORY I	
3:00 pm — 4:00 pm	Chia-Hung Yang & Sean P. Cornelius, *Emergence of Laplace-distributed growth rates in complex systems*	EV
	Daniel Larremore, Caterina De Bacco & Cris Moore, *A physical model for efficient ranking in networks*	
	Pim van der Hoorn, Dima Krioukov & Gabor Lippner, *Ensemble of sparse graphs with scale-free degree distribution that maximizes Gibbs entropy*	
	Muhammed Abdullah Canbaz, Khalid Bakhshaliyev & Mehmet Gunes, *Router level topologies of autonomous systems*	
	Maksim Kitsak, Alexander A. Ganin, Daniel Eisenberg, Pavel L. Krapivsky, Dmitri Krioukov, David L. Alderson & Igor Linkov, *Stability of a giant connected component in a complex network*	
4:00 pm — 4:30 pm	Coffee break	EV

	CONTROL & DYNAMICS I	
4:30 pm — 5:30 pm	Kanchan Mopari, Alessio Cardillo, Paolo De Los Rios, Alex Arenas & Jesus Gomez-Gardeñes, *To vaccinate or not to vaccinate? A coevolutionary dilemma*	EV
	Sebastian Ruf, Magnus Egerstedt & Jeff Shamma, *Herdability of complex networks*	
	Juan Carlos Rocha Gordo & Jessica Gephart, *How far does a shock event spread on a network? Detecting causality on the salmon trade network*	
	Bogang Jun, Aamena Alshamsi, Jian Gao & César Hidalgo, *Relatedness, knowledge diffusion, and the evolution of bilateral trade*	
	Joshua Becker, Devon Brackbill & Damon Centola, *Network dynamics of social influence in the wisdom of crowds*	

Tuesday, March 6th

8:30 am — 9:00 am	Registration & Breakfast	EV
9:00 am — 9:45 am	KEYNOTE: Olaf Sporns, *Network Neuroscience: Understanding the Structure and Function of the Brain*	
	BRAIN NETWORKS	
9:45 am — 10:45 am	Emma Towlson, Gang Yan, Petra Vertes, Yee Lian Chew, Denise Walker, William Schafer & Albert-László Barabási, *Control principles in the Caenorhabditis elegans nervous system*	EV
	Ali Faqeeh, Saeed Osat, Filippo Radicchi & James Gleeson, *Structurally induced noncritical power-laws in neural avalanches*	
	Ari Kahn, Elisabeth Karuza, Jean Vettel & Danielle Bassett, *Network constraints on learnability of probabilistic motor sequences*	
	Nima Dehmamy, Soodabeh Milanlouei & Albert-László Barabási, *Structural phase transition in physical networks embedded in 3D*	
	Farnaz Zamani Esfahlani & Hiroki Sayama, *A percolation-based thresholding method with applications in functional connectivity analysis*	
10:45 am — 11:15 am	Coffee break	EV
	NETWORK APPLICATIONS I	
11:15 am — 12:30 pm	Albert Solé-Ribalta, Sergio Gómez & Alex Arenas, *Decongestion of urban areas with hotspot-pricing*	EV
	Tarik Roukny, *Compressing networked markets*	
	Luiz G. A. Alves, *Statistical physics of crime: From scaling laws to complex networks*	
	Stefano Balietti & Christoph Riedl, *The market structure for innovation*	
	Ieke De Vries & Brennan Klein, *Firm responses to illicit market dynamics*	
	Luca Pappalardo, Paolo Cintia, Dino Pedreschi, Fosca Giannotti & Albert-László Barabási, *Understanding human perception of performance*	
12:30 pm — 2:00 pm	Lunch	EV
2:00 pm — 2:30 pm	INVITED TALK: J.-P. Onnela, *Parameter Inference and Model Selection for Mechanistic Network Models*	EV
2:30 pm — 3:00 pm	INVITED TALK: Sam Scarpino, *The risk of sustained sexual transmission of Zika is underestimated*	
	EPIDEMICS & SPREADING	
3:00 pm — 4:00 pm	Dina Mistry, Ana Pastore y Piontti, Maria Litvinova, Marcelo Ferreira Da Costa Gomes, Syed Haque, Kunpeng Mu, Xinyue Xiong, Quanhui Liu, Laura Fumanelli, Stefano Merler, Marco Ajelli & Alessandro Vespignani, *A data-driven computational approach to infer social contact networks in the context of infectious disease modeling*	EV
	Joan T Matamalas, Alex Arenas & Sergio Gómez, *Epidemic extinction driven by link conductance*	
	Flavio Iannelli, Manuel Sebastian Mariani & Igor M Sokolov, *Network centrality based on reaction-diffusion dynamics reveals influential spreaders*	
	Michele Coscia, *Popularity spikes hurt the future implementations of protomemes*	
	Vittoria Colizza, *Demographic and biological drivers of rabies persistence in a large dog population in Africa*	
4:00 pm — 4:30 pm	Coffee break	EV
4:30 pm — 5:15 pm	Poster Slam A	
5:15 pm — 6:00 pm	Free time	
6:00 pm — 8:00 pm	Poster Session A & Cocktail Reception	FC

Wednesday, March 7th

Time	Event	
8:30 am — 9:00 am	Registration & Breakfast	EV
9:15 am — 10:00 am	KEYNOTE: Fernanda Viégas & Martin Wattenberg, *From networks to geometry: lessons from machine learning*	
	NETWORK APPLICATIONS II	
10:00 am — 11:15 am	Jesus Gomez-Gardeñes, *Characterization of hunter-gatherer networks and implications for cumulative culture*	EV
	Philipp Lorenz & Philipp Hoevel, *Modeling the rise and fall of online topics*	
	Takashi Isogai, *Dynamic correlation network analysis of financial asset returns with network clustering*	
	Lorenzo Gabrielli, Daniele Fadda, Giulio Rossetti, Mirco Nanni, Leonardo Piccini, Fosca Giannotti, Dino Pedreschi & Patrizia Lattarulo, *Discovering mobility functional Areas: A mobility data analysis approach*	
	Patrick Gildersleve & Taha Yasseri, *Inspiration, captivation, and misdirection: Emergent properties in networks of online navigation*	
	Alec Kirkley, Hugo Barbosa-Filho, Marc Barthelemy & Gourab Ghoshal, *Structural invariants in street networks: modeling and practical implications*	
11:15 am — 11:45 am	Coffee break	EV
11:45 am — 12:30 pm	Poster Slam B	
12:30 pm — 2:30 pm	Lunch (provided) & Poster Session B	CC
2:30 pm — 3:00 pm	INVITED TALK: James Evans, *The Wisdom of Polarized Crowds*	
3:00 pm — 3:30 pm	INVITED TALK: Aaron Clauset, *Faculty hiring and epistemic inequality in the spread of scientific ideas*	EV
3:30 pm — 3:45 pm	Coffee Break	
	SOCIAL NETWORKS II	
3:45 pm — 5:00 pm	Felipe Montes, Roberto C. Jimenez & J.-P. Onnela, *Connected but segregated: Social networks in rural villages*	EV
	Balazs Vedres and Ancsa Hannak, *Networks, gender, and success in video games development*	
	Alfredo J Morales, Leila Hedayatifar & Yaneer Bar-Yam, *US social fragmentation*	
	David Lazer, Jason Radford & Briony Swire-Thompson, *Deliberation in groups and networks: overcoming the hidden profile problem*	
	Bence Sagvari & Balazs Lengyel, *Social networks and economic disparities in cities*	
	Sanjay Guruprasad & César Hidalgo, *The Influence of Collaboration Networks on Programming Language Acquisition*	
5:30 pm — 6:30 pm	Art of Networks Reception	NS
6:30 pm —8:00 pm	Caucus for Women in Network Science (WiNS)	NS

Thursday, March 8th

Time	Event	
8:30 am — 9:00 am	Registration & Breakfast	EV
9:00 am — 9:45 am	KEYNOTE: Jon Kleinberg, *Competition and Selection Among Conventions in Social Networks*	
	COMMUNITY DETECTION	
9:45 am — 10:45 am	Amir Ghasemian, Homa Hosseinmardi & Aaron Clauset, *Evaluating and comparing overfit in models of network community structure*	EV
	Michael Schaub & Leto Peel, *Efficient detection of hierarchical block structures in networks*	
	Philip Chodrow & Peter Mucha, *Dynamics of community formation in an adaptive voter model*	
	Tsuyoshi Murata & Naveed Afzal, *Modularity optimization as a training criterion for graph neural networks*	
	Javier Borge-Holthoefer, Albert Solé-Ribalta, Manuel Sebastian Mariani & Claudio Juan Tessone, *Revealing in-block nestedness in social and ecological networks*	
10:45 am — 11:15 am	Coffee break	
	CONTROL & DYNAMICS II	
11:15 am — 12:15 pm	Yang Yang, Takashi Nishikawa & Adilson Motter, *Vulnerability and co-susceptibility determine large network cascades*	EV
	Jaewoo Kim, Kyu-Min Lee & Kwang-Il Goh, *Threshold cascade dynamics on signed networks*	

Time	Session	
	Giovanni Francesco Massari, Ilaria Giannoccaro & Giuseppe Carbone, *The effect of contrarians on the decision making performance of groups*	
	Christopher Lynn, Lia Papadopoulos, Daniel Lee & Danielle Bassett, *Collective human activity emerges from simple pairwise interactions*	
	Alfredo Morales, Vaibhav Vavilala, Rosa M. Benito & Yaneer Bar-Yam, *Global Patterns of Synchronization in Human Communications*	
12:15 pm — 2:00 pm	Lunch	*
	NETWORK THEORY II	
2:00 pm — 3:15 pm	Philipp Hoevel, Andreas Koher & Hartmut Lentz, *Estimating epidemic thresholds in temporal networks*	EV
	Andrew Mellor, *The temporal event graph*	
	Dane Taylor, Rajmonda Caceres & Peter Mucha, *Theoretical foundations for temporal network preprocessing and community detection*	
	Ronald Robertson, David Lazer & Christo Wilson, *Modeling suggestion networks for algorithm auditing*	
	Timothy Larock, Timothy Sakharov, Sahely Bhadra & Tina Eliassi-Rad, *Learning to complete partially observed networks*	
	Xindi Wang, Onur Varol, Tina Eliassi-Rad & Albert-László Barabási, *Learning to place objects: A network-based approach*	
3:15 pm — 3:45 pm	Coffee break	
3:45 pm — 4:15 pm	INVITED TALK: Milena Tsvetkova, *The Dynamics of Disagreement*	EV
4:15 pm — 4:45 pm	INVITED TALK: Jessika Trancik, *How to make technology solve big problems?*	
4:45 pm — 5:00 pm	Closing Remarks & Poster Awards	

SUMMARY OF SPECIAL EVENTS

Featured Events

Art of Networks Reception. The Network Science Institute will host a special reception to showcase a curated installation of network visualizations—the Art of Networks III. Now in its third edition, this exhibition explores the role of aesthetics and design in data representation and effective scientific communication. Visualizations add insight and intuition to the numerical analyses in network science, as well as offer opportunities to disseminate knowledge to a broader audience. Information visualizations can help us make sense of complex phenomena by structuring data in ways that facilitate detection of patterns and trends, and ultimately, transform data into meaningful information. Projects were selected from top visualization research labs and studios around the world that are producing some of the most innovative work in this area. Appetizers will be served, accompanied by an open bar.

For questions about the art, contact (meirelles.isabel@gmail.com); for logistical inquiries, contact Kate Coronges (kcoronges@gmail.com).

March 7, 5:30 pm – 6:30 pm

Network Science Institute Lobby, 177 Huntington Ave, Boston, MA 02115

Poster Session & Welcome Reception. During our first Poster Session, a welcome Reception will offer light dinner and drinks (cash bar). This is a time for scholarly exchange and relaxed conversation. For questions, contact Joseph Kenny josephkena@gmail.com or Alex Gates (ajgates42@gmail.com).

March 6, 6:00 pm – 8:00 pm

Fenway Center, 77 St Stephen St, Boston, MA 02115

Special community events

Symposium for Young Network Scientist (SYNS) Pre-Event: Paper Unwind. SYNS is hosting a Paper Unwind for PhD students and young network scientists. Speakers will tell the "real story" behind how a recent paper came together: How did the idea come to be? How did the collaboration work? What were the struggles in doing this research? Was there a statistical method that proved to be really useful? How many venues was the work submitted to? These topics will fuel further disucssion about developing more realistic expectations about the process of conducting and publishing interdisciplinary research. For questions, contact brennanjamesklein@gmail.com

March 4, 5:00 pm – 8:00 pm

Network Science Institute, 177 Huntington Ave, Floor 2, Boston, MA 02115

Caucus for Women in Network Science (WiNS) Meeting. The first ever meeting to form of Caucus of Women stimulates opportunities for education, employment, and career advancement of women (cis, trans, and genderqueer) in Network Science. By leveraging professional and social contacts among its members, the Caucus will promote the increased participation of women in academic conferences and on organizing boards and executive committees in the field. WiNS meetings will also provide a forum for discussing issues concerning women in the field, and encourage the thoughtful development of strategies and solutions. For questions, contact b.welles@northeastern.edu.

March 7, 6:30 pm – 8:00 pm

Network Science Institute, 177 Huntington Ave, Floor 10, Boston, MA 02115