

 2025 Complex Networks Program Review Dr. Donald Wagner August 5-7, 2025 Arlington, VA - hybrid		
Basic Research Innovation Collaboration Center (BRICC) 4100 N Fairfax Drive Suite 450 Arlington, VA 22204		
Agenda Day 1 August 5, 2025		
Time	Topic	Speaker
8:00-8:30	Registration	
8:30-8:40	Program status update	Don Wagner, AFOSR
8:40-9:10	Probabilistic Power Domination	Beth Morrison, AFRL/RV
9:10-9:40	Induced Subgraph Exclusion: Structure and Algorithms	Paul Seymour, Princeton
9:40-10:10	Induced Subgraphs and Tree-Decompositions	Maria Chudnovsky, Princeton (virtual)
10:10-11:00	BREAK	
11:00-11:30	Maximum-Entropy Sampling for Sensor Networks: Graphical Models, Algorithmics, and Generalizations	Jon Lee, Michigan
11:30-12:00	Transmission Control in Complex Networks Using Modal Methods	Subhrajit Bhattacharya, Lehigh
12:00-1:30	LUNCH	
1:30-2:00	Network Architectures for Combating Noise and Malicious Activity	Stephanie Gil, Harvard
2:00-2:30	Networked Adversarially Resilient Reconfigurable Operations in Obstacle Worlds for Safe Planning and Attack-tolerant Control and Estimation	Dimitra Panagou, Michigan
2:30-3:00	Multi-Scale Hydra: A Dynamic Hybrid Submodular Framework for Multi-Scale Network Resilience Incorporating Invariant Properties	Radha Poovendran, U Washington
3:00-3:20	BREAK	
3:20-3:50	Learning Algorithms for Autonomous Security in (Mixed-) Autonomous Networks	Saurabh Amin, MIT
3:50-4:20	Topological modeling and analysis of complex stochastic networks	Gennady Samorodnitsky, Cornell
4:20-4:50	Topological modeling and analysis of complex stochastic networks	Takashi Owada, Purdue
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Agenda Day 2 August 6, 2025		
Time	Topic	Speaker
8:00-8:30	Check In	
8:30-8:40	Discussion	Don Wagner, AFOSR
8:40-9:10	(YIP) Robust and Optimal Resource Allocation over Networks Subject to Externalities	Rasoul Etesami, Illinois
9:10-9:40	Dynamic Military Airlift Network Design in a Contested Environment	Rob Dell, Buffalo
9:40-10:10	Designing Defensive Strategies to Protect Terrestrial-Satellite Communication Networks in Contested Environments	Jose Walteros, Buffalo
10:10-11:00	BREAK	
11:00-11:30	Structural and dynamical optimization of flow networks	Filippo Radicchi, Indiana
11:30-12:00	Quantum algorithms on complex networks	Asaf Ferber, UC-Irvine
12:00-1:30	LUNCH	
1:30-2:00	Bicriteria Network Design Problems	R. Ravi, CMU
2:00-2:30	Competition and Collaboration in Complex Networks	Eva Tardos, Cornell
2:30-3:00	Advances in Circuit Augmentation	Steffen Borgwardt, UC-Denver
3:00-3:20	BREAK	
3:20-3:50	(YIP) Foundations of Resilient Distributed Resource Allocation in Open Networks	Thinh Doan, UT-Austin
3:50-4:20	(YIP) Targeted interventions and higher-order interactions in complex networks	Francesca Parise, Cornell (virtual)
4:20-4:50	Efficiently Exploiting Structure for Causal Inference in the Presence of Network Interference	Christina Yu, Cornell (virtual)
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Agenda Day 3 August 7, 2025		
Time	Topic	Speaker
8:00-8:30	Check In	
8:30-8:40	Discussion	Don Wagner, AFOSR
8:40-9:10	Resource Allocation in Complex Adversarial Environments	Jason Marden, UCSB
9:10-9:40	Novel Metrics and Randomized Algorithms for Robust Networked Multiagent Coordination	Philip Brown, UC-Colorado Springs
9:40-10:10	Distributed Fake News Detection	Behrouz Touri, UCSD
10:10-11:00	BREAK	
11:00-11:30	Optimal Control Approach to Network Centrality	Massimo Franceschetti, UCSD
11:30-12:00	Intelligent Distributed Multi-Agent Systems	Ji Liu, SUNY-Stony Brook
12:00-1:30	LUNCH	
1:30-2:00	Estimation and Control of Network Connectivity via Network Energy	Marco Gamarra AFRL/RI
2:00-3:00	(MURI) Understanding Social Network-Transcendent Online/Offline Behavioral Dynamics: From Data to Models to Prediction	Lei Ying, Michigan
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