



**The 19th International Symposium on
 Stabilization, Safety, and Security (SSS 2017)**
**Boston University Photonics Center, Massachusetts,
 USA**
November 5-8, 2017

Tentative Technical Program

Sunday, November 5th: Workshops Technical Program Location: PHO 206, PHO 210, PHO 211		
Time	Program	Location
8:00-8:45	On-Site Registration	2nd floor atrium
8:45-9:00	Conference Opening	
9:00-10:00	Morning Tutorial	
	Tutorial on Principles of Fog Computing and Algorithmic Methods (POFOA)	
10:00-10:30	Coffee Break	2nd floor atrium
10:30-12:00	Morning Tutorial	
	Tutorial on Principles of Fog Computing and Algorithmic Methods (POFOA)	
12:00-13:30	Lunch Break	PHO 906 – East End Lounge
13:30-14:30	Afternoon Workshops	
	1st Workshop on Storage, Control, Networking in Dynamic Systems (SCNDS)	
	Elegance in Computation - A Salute to The Legacy of Prof. Mohamed Gouda	
14:30-15:00	Coffee Break	2nd floor atrium
15:00-17:00	Afternoon Workshops	
	1st Workshop on Storage, Control, Networking in Dynamic Systems (SCNDS)	
	Elegance in Computation - A Salute to The Legacy of Prof. Mohamed Gouda	
18:00-	SSS 2017 Conference Reception	West End Lounge

Monday, November 6th: Symposium Technical Program		
Time	Program	Location
8:00-8:45	On-Site Registration	9th floor atrium lounge
8:45-9:00	Conference Opening	PHO 906
9:00-10:00	Keynote 1: Elections, Technology, and the Pursuit of Integrity Speaker: Alexander A. Schwarzman, University of Connecticut; USA	PHO 906
10:00-10:20	Coffee Break	9th floor atrium lounge
10:20-12:00	Session 1 Chair: Ari Trachtenberg, Boston University, USA	PHO 906
10:20-10:50	An Improved Approximate Agreement Algorithm in the Presence of Mobile Byzantine Faults <i>Lewis Tseng</i>	
10:50-11:20	Generalized Paxos made Byzantine (and Less Complex) <i>Miguel Pires, Srivatsan Ravi and Rodrigo Rodrigues</i>	
11:20-11:50	Self-Stabilizing Rendezvous of Synchronous Mobile Agents in Graphs <i>Fukuhito Ooshita, Ajoy K. Datta and Toshimitsu Masuzawa</i>	
11:50-12:00	Brief Announcement: Reduced Space Self-stabilizing Center Finding Algorithms in Chains and Trees <i>Yuichi Sudo, Ajoy K. Datta, Lawrence Larmore and Toshimitsu Masuzawa</i>	
12:00-13:00	Lunch Break	PHO 906 – East End Lounge
13:00-14:40	Session 2 Chair: Chryssis Georgiou, University of Cyprus	PHO 906
13:00-13:30	Cryptocurrency Smart Contracts for Distributed Consensus of Public Randomness <i>Peter Mell, John Kelsey and James Shook</i>	
13:30-14:00	Bitcoin a Distributed Shared Register <i>Emmanuelle Anceaume, Romaric Ludinard, Maria Potop-Butucaru and Frédéric Tronel</i>	
14:00-14:30	Scalable Funding of Bitcoin Micropayment Channel Networks <i>Conrad Burchert, Christian Decker and Roger Wattenhofer</i>	
14:30-14:40	Brief Announcement: ZeroBlock: Timestamp-	

	Free Prevention of Block-Withholding Attack in Bitcoin <i>Siamak Solat and Maria Potop-Butucaru</i>	
14:40-15:00	Coffee Break	9th floor atrium lounge
15:00-17:00	Session 3 Chair: Paola Flocchini, University of Ottawa, Canada	PHO 906
15:00-15:30	A Self-Stabilizing General De Bruijn Graph <i>Michael Feldmann and Christian Scheideler</i>	
15:30-16:00	A fully asynchronous and fault tolerant distributed algorithm to compute a minimum graph orientation <i>Noël Gillet and Nicolas Hanusse</i>	
16:00-16:30	Universally Optimal Gathering under Limited Visibility <i>Pavan Poudel and Gokarna Sharma</i>	
16:30-17:00	Constant-Time Complete Visibility for Asynchronous Robots with Lights <i>Gokarna Sharma, Ramachandran Vaidyanathan and Jerry Trahan</i>	
17:00-	Business Meeting	
Tuesday, November 7th: Symposium Technical Program		
Time	Program	Location
8:00-8:45	On-Site Registration	PHO 906
8:45-9:00	Conference Opening	PHO 906
9:00-10:00	Keynote 2: Robust ant colony algorithms: Density estimation and house-hunting Speaker: Nancy Lynch, MIT; USA	PHO 906
10:10-10:20	Coffee Break	9th floor atrium lounge
10:20-12:20	Session 4 Session Chair: Emmanuelle Anceaume, IRISA, RENNES, France	PHO 906
10:20-11:10	The Dynamics and Stability of Probabilistic Population Processes <i>Ioannis Chatzigiannakis and Paul Spirakis</i>	
11:10-11:40	Computing the Fault-Containment Time of Self-Stabilizing Algorithms using Markov Chains and Lumping <i>Volker Turau</i>	
11:40-12:10	Space-Optimal Proportion Consensus with Population Protocols <i>Gennaro Cordasco and Luisa Gargano</i>	
12:10-12:20	Brief Announcement: Passive and Active Attacks on Audience Response Systems using Software Defined Radios <i>Khai Phan, Ryan Ewing, David Starobinski and Liangxiao Xin</i>	

12:20-13:20	Lunch Break	PHO 906 – East End Lounge
13:20-15:00	Session 5 Chair: Ioannis Chatzigiannakis, Sapienza University of Rome, Italy	PHO 906
13:20-13:50	Robust Routing Made Easy <i>Christoph Lenzen and Moti Medina</i>	
13:50-14:20	Cover Time in Edge-Uniform Stochastically-Evolving Graphs <i>Ioannis Lamprou, Russell Martin and Paul Spirakis</i>	
14:20-14:50	How to simulate message-passing algorithms in mobile agent systems with faults <i>Tsuyoshi Gotoh, Fukuhito Ooshita, Hirotsugu Kakugawa and Toshimitsu Masuzawa</i>	
14:50-15:00	Brief Announcement: Asynchronous, Distributed Optical Mutual Exclusion <i>Ahmed Mansour, Ramachandran Vaidyanathan and Shuangqing Wei</i>	
15:00-15:20	Coffee Break	9th floor atrium lounge
15:20-17:00	Session 6 Chair: Toshimitsu Masuzawa, Osaka University, Japan	PHO 906
15:20-15:50	Self-stabilizing localization of the middle point of a line segment by an oblivious robot with limited visibility <i>Akihiro Monde, Yukiko Yamauchi, Shuji Kijima and Masafumi Yamashita</i>	
15:50-16:20	Fault-Induced Dynamics of Oblivious Robots on a Line <i>Jean-Lou De Carufel and Paola Flocchini</i>	
16:20-16:50	ASSESS: A Tool for Automated Synthesis of Distributed Self-Stabilizing Algorithms <i>Fathiyeh Faghih and Borzoo Bonakdarpour</i>	
16:50-17:00	Brief Announcement: Optimal Asynchronous Rendezvous for Mobile Robots with Lights <i>Takashi Okumura, Koichi Wada and Yoshiaki Katayama</i>	
18:00-	SSS 2017 Conference Banquet	Barrister Hall, Law Building
Wednesday, November 8th: Symposium Technical Program		
Time	Program	Location
8:30-9:30	Keynote 3: The Dynamics of Initial Coin Offerings Speaker: Christian Catalini, MIT; USA	PHO 906
9:30-9:50	Coffee Break	9th floor atrium

		lounge
9:50-12:00	Session 7 Chair: Maria Potop-Butucaru, UPMC Sorbonne Universités, France	PHO 906
9:50-10:20	Broadcast Encryption with Both Temporary and Permanent Revocation <i>Dan Brownstein, Shlomi Dolev and Niv Gilboa</i>	
10:20-10:50	Proof-Labeling Schemes: Broadcast, Unicast and In Between <i>Boaz Patt-Shamir and Mor Perry</i>	
10:50-11:20	Self-stabilizing Distributed Stable Marriage <i>Marie Laveau, George Manoussakis, Joffroy Beauquier, Thibault Bernard, Janna Burman, Johanne Cohen and Laurence Pilard</i>	
11:20-11:50	On Security Analysis of Proof-of-Elapsed-Time (PoET) <i>Lin Chen, Lei Xu, Nolan Shah, Zhimin Gao, Yang Lu and Weidong Shi</i>	
11:50-12:00	Brief Announcement: Federated Code Auditing and Delivery for MPC <i>Frederick Jansen, Kinan Dak Albab, Andrei Lapets and Mayank Varia</i>	
12:00-13:00	Lunch Break	PHO 906 – East End Lounge
13:00-14:40	Session 8 Chair: Taisuke Izumi, Nagoya Institute of Technology, Japan	PHO 906
13:00-13:30	Ant-Inspired Dynamic Task Allocation via Gossiping <i>Hsin-Hao Su, Lili Su, Anna Dornhaus and Nancy Lynch</i>	
13:30-14:00	Relaxed Data Types as Consistency Conditions <i>Edward Talmage and Jennifer Welch</i>	
14:00-14:30	Self-Tuning Eventually-Consistent Data Stores <i>Shankha Chatterjee and Wojciech Golab</i>	
14:30-14:40	Brief Announcement: A self-stabilizing algorithm for the minimal generalized dominating set problem <i>Hisaki Kobayashi, Hirotsugu Kakugawa and Toshimitsu Masuzawa</i>	
14:40-15:00	Coffee Break	9th floor atrium lounge
15:00-16:40	Session 9 Chair: Koichi Wada, Hosei University, Japan	PHO 906
15:00-15:30	An Efficient Silent Self-Stabilizing 1-Maximal Matching Algorithm under Distributed Daemon for Arbitrary Networks <i>Michiko Inoue, Fukuhito Ooshita and Sebastien Tixeuil</i>	
15:30-16:00	TorBricks: Blocking-Resistant Tor Bridge	

	Distribution <i>Mahdi Zamani, Jared Saia and Jedidiah Crandall</i>	
16:00-16:30	Optimum Algorithm for Mutual Visibility among Asynchronous Robots with Lights <i>Subhash Bhagat and Krishnendu Mukhopadhyaya</i>	
16:30-16:40	Brief Announcement: Space-efficient Uniform Deployment of Mobile Agents in Asynchronous Unidirectional Rings <i>Masahiro Shibata, Hirotsugu Kakugawa and Toshimitsu Masuzawa</i>	
16:40-16:50	Concluding Remarks	PHO 906