SSS 2012 Schedule

Monday, Oct. 1:

8:00 - 9:00 am   Registration

9:00 - 12:00 pm   **Tutorial 1: Mohamed Gouda**
The Secret History of System Stabilization

12:00 - 1:00 pm   Lunch break

1:00 - 4:00 pm   **Tutorial 2: Anish Arora and Kannan Srinivasan**
On the Physical Layer of Wireless Networks

4:30 - 6:00 pm   Welcome Reception

Tuesday, Oct. 2

8:00 - 8:45 am   Registration

8:45 - 9:00 am   Conference Opening

9:00 - 10:00 am   **Invited talk: Nitin Vaidya** *(Session Chair: Andrea Richa)*
Resilient Distributed Consensus

10:00 - 10:20 am   Coffee break

10:20 - 12:00 pm   **Self-Stabilization I:** *(Session Chair: Sebastien Tixeuil)*

Best Paper Award
Communication-Efficient Self-stabilization in Wireless Networks.
Tomoya Takimoto, Fukuhito Ooshita, Hirotsugu Kakugawa and Toshimitsu Masuzawa

Self-stabilizing local k-placement of replicas with minimal variance.
Sven Köhler, Volker Turau and Gerhard Mentges

Self-stabilizing algorithm for maximal graph partitioning into triangles.
Neggazi Brahim, Haddad Mohammed and Kheddouci Hamamache

Brief Announcement: Self-Stabilizing Synchronization Of Arbitrary Digraphs In Presence Of Faults.
Mahyar Malekpour

Brief Announcement: Self-Stabilizing Silent Disjunction in an Anonymous Network.
Ajoy Datta, Stephane Devismes and Lawrence Larmore

12:00- 1:30 pm   Lunch break

1:30- 3:10 pm   **Ad-Hoc and Sensor Networks:** *(Session Chair: Anish Arora)*

On the self-stabilization of mobile oblivious robots in uniform rings
Fukuhito Ooshita and Sebastien Tixeuil

Optimal Grid Exploration by Asynchronous Oblivious Robots
Stphane Devismes, Anissa Lamani, Franck Petit, Pascal Raymond and Sebastien Tixeuil

Terminating Population Protocols via some Minimal Global Knowledge Assumptions
Othon Michail, Ioannis Chatzigiannakis and Paul Spirakis

Brief Announcement: The Degrading Effect of Forgetting on a Synchronizer
Matthias Fugger, Alexander Kössler, Thomas Nowak and Martin Zeiner

Brief Announcement: Mobile Agent Rendezvous on Edge Evolving Rings
Tomoko Izumi, Yukiko Yamauchi and Sayaka Kamei

3:10- 3:30 pm   Coffee break

3:30- 4:45 pm   **Formal Methods :** *(Session Chair: Borzoo Bonakdarpour)*

Best Student Paper Award
High-Level Executable Specifications of Distributed Algorithms
Yanhong A. Liu, Scott D. Stoller and Bo Lin

Formal Verification of Security Preservation for Migrating Virtual Machines in the Cloud.
Yosr Jarraya, Arash Eghtesadi, Mourad Debbabi, Ying Zhang and Makan Pourzandi

Using Abstract Simulation for Performance Evaluation of Stabilizing Algorithms: The Case of Propagation of Information with Feedback.
Jordan Adamek, Mikhail Nesterenko and Sebastien Tixeuil

5:30- 7:30 pm   **Business meeting**

Wednesday, Oct. 3

9:00-10:00 am

                      Invited talk: Boaz Patt Shamir *(Session Chair: Christian Scheideler)*
                      Low-congestion distributed algorithms

10:00-10:20 am   coffee break

10:20-12:00 pm   **<u>Self-Stabilization II :</u>** *(Session Chair: Maria Potop-Butucaru)*

                      Self-Stabilizing End-to-End Communication in Bounded Capacity, Omitting, Duplicating and Non-FIFO Dynamic Networks.
                      Shlomi Dolev, Ariel Hanemann, Elad Michael Schiller and Shantanu Sharma

                      Self-stabilizing Distributed Data Fusion.
                      Bertrand Ducourthial, Vronique Cherfaoui and Thierry Denoeux

                      From self- to self- stabilizing with service guarantee weight-based clustering.
                      Colette Johnen and Fouzi Mekhaldi

                      <u>Brief Announcement:</u> Verification of Stabilizing Programs with SMT Solvers
                      Jingshu Chen and Sandeep Kulkarni

                      <u>Brief Announcement:</u> MP-State: State-Aware Software Model Checking of Message-Passing Systems.
                      Can Arda Muftuoglu, Peter Bokor and Neeraj Suri

12:20- 8:00 pm   Excursion to Niagara Falls and Winery (Lunch will be served during the excursion)

8:00-10:00 pm   Banquet

Thursday, Oct. 4

9:00-10:00 am   **Invited talk: Dahlia Malkhi** *(Session Chair: Sukumar Ghosh)*
                      What happens when systems go elastic?

10:00-10:20 am   Coffee break

10:20-12:00 pm	**Secure Systems :** *(Session Chair: Shlomi Dolev)*

Oblivious Assignment with m Slots.
Giuseppe Ateniese, Roberto Baldoni, Silvia Bonomi and Giuseppe Antonio Di Luna

BLIP: Non-interactive Differentially-Private Similarity Computation on Bloom filters.
Mohammad Alaggan, Sbastien Gambs and Anne-Marie Kermarrec

DQMP: A Decentralized Protocol to Enforce Global Quotas in Cloud Environments.
Johannes Behl, Tobias Distler and Ruediger Kapitza

Brief Announcement: KARYON: Towards Safety Kernels for Cooperative Vehicular Systems.
Anto Casimiro, Jörg Kaiser, Johan Karlsson, Elad Michael Schiller, Philippas Tsigas, Pedro Costa, Jose Parizi, Rolf Johansson and Renato Librino

Brief Announcement: Arbitrators in the Security Infrastructure.
Shlomi Dolev, Niv Gilboa and Ofer Hermoni

12:00- 2:00 pm	lunch break
2:00- 3:40 pm	**Peer-to-Peer and Social Systems :** *(Session Chair: Christian Schindelhauer)*

Optimization in a Self-Stabilizing Service Discovery Framework for Large Scale Systems.
Eddy Caron, Florent Chuffart, Anissa Lamani and Franck Petit

Scalable Byzantine agreement with a random beacon.
Olumuyiwa Oluwasanmi and Jared Saia

On Finding Better Friends.
Philipp Brandes and Roger Wattenhofer

Brief Announcement: Detecting Users' Connectivity on Online Social Networks
Na Li, Sajal Das and Nan Zhang

Brief Announcement: Discovering and Assessing Fine-grained Metrics in Robot Networks Protocols.
FranCois Bonnet, Xavier Dfago, Maria Gradinariu Potop-Butucaru, Franck Petit and Sebastien Tixeuil

3:40- 4:00 pm	Coffee break

4:00- 5:15 pm   **<u>Fault-Tolerant Systems :</u>** *(Session Chair: Christian Scheideler)*

All-to-All Gradecast using Coding with Byzantine Failures
John Bridgman and Vijay Garg

Fault-Tolerant Exploration of an Unknown Dangerous Graph by
Scattered Agents.
Paola Flocchini, Matthew Kellett, Peter C. Mason and Nicola Santoro

A Theory of Fault Recovery for Component-Based Models.
Borzoo Bonakdarpour, Marius Bozga and Gregor Goessler