

SSS 2010 – PROGRAM

NEW YORK CITY, USA, SEPTEMBER 20-22, 2010

MONDAY, 20 SEPTEMBER 2010

08:50 – 09:00 SSS Welcome announcements by Shlomi Dolev

09:00 – 10:00 SSS Invited Lecture I, Chaired by Michael Fischer

Arcane Information, Solving Relations, and Church Censorship
Leonid A. Levin

10:00 – 10:15 Coffee Break

10:15 – 12:00 Session I, Chaired by Franck Petit

10:15-10:40 Systematic Correct Construction of Self-stabilizing Systems: A Case Study
Ananda Basu, Borzoo Bonakdarpour, Marius Bozga, Joseph Sifakis

10:40-11:05 A Fault-Resistant Asynchronous Clock Function
Ezra N. Hoch, Michael Ben-Or, Danny Dolev

11:05-11:30 Self-Stabilizing Leader Election in Dynamic Networks
Ajay K. Datta, Lawrence L. Larmore, Hema Piniganti

11:30-11:55 Loop-Free Super-Stabilizing Spanning Tree Construction
Lélia Blin, Maria Gradinariu Potop-Butucaru, Stephane Rovedakis, Sébastien Tixeuil

11:55-12:00 Brief Announcement: On the Hardness of Topology Inference
H. B. Acharya , Mohamed Gouda

12:00 – 13:30 Lunch

13:30 – 15:10 Session II, Chaired by Jie Gao

13:30-13:55 A New Technique for Proving Self-Stabilizing under the Distributed Scheduler
Sven Köhler, Volker Turau

13:55-14:20 A Transformational Approach for Designing Scheduler-Oblivious Self-Stabilizing Algorithms
Abhishek Dhama, Oliver Theel

14:20-14:45 On Byzantine Containment Properties of the $\min + 1$ Protocol
Swan Dubois, Toshimitsu Masuzawa, Sébastien Tixeuil

14:45-15:10 Efficient Self-Stabilizing Graph Searching in Tree Networks
Jean Blair, Fredrik Manne, Rodica Mihai

15:10 – 15:30 Coffee Break

15:30 – 17:10 Session III, Chaired by Rebecca Wright

15:30-15:55 Adaptive Containment of Time-Bounded Byzantine Faults
Yukiko Yamauchi, Toshimitsu Masuzawa, Doina Bein

15:55-16:20 Authenticated Broadcast with a Partially Compromised Public-Key Infrastructure
S. Dov Gordon, Jonathan Katz, Ranjit Kumaresan, Arkady Yerukhimovich

16:20-16:45 On Applicability of Random Graphs for Modeling Random Key Predistribution for Wireless Sensor Networks
Tuan Manh Vu, Reihaneh Safavi-Naini, Carey Williamson

16:45 – 16:55 Coffee Break

16:55 – 18:10 Session IV, Chaired by Thomas Fuhrmann

16:55-17:20 “Slow is Fast” for Wireless Sensor Networks in the Presence of Message Losses
Mahesh Arumugam, Murat Demirbas, Sandeep S. Kulkarni

17:20-17:45 Storage Capacity of Labeled Graphs
Dana Angluin, James Aspnes, Rida A. Bazzi, Jiang Chen, David Eisenstat, Goran Konjevod

17:45-18:10 Lightweight Live Migration for High Availability Cluster Service
Bo Jiang, Binoy Ravindran, Changsoo Kim

18:10 – 19:00 SSS Plenary Assembly

TUESDAY 21 SEPTEMBER 2010

09:00 – 10:00 SSS Invited Lecture II, Chaired by Moti Yung

Computation of Equilibria and Stable Solutions
Mihalis Yannakakis

10:00 – 10:15 Coffee Break

10:15 – 12:00 Session V, Chaired by Benjamin Goldberg

10:15-10:40 Modeling and Analyzing Periodic Distributed Computations
Anurag Agarwal, Vijay K. Garg, Vinit Ogale

10:40-11:05 Complexity Issues in Automated Model Revision Without Explicit Legitimate State

Fuad Abujarad, Sandeep S. Kulkarni

11:05-11:30 Algorithmic Verification of Population Protocols

Ioannis Chatzigiannakis, Othon Michail, Paul G. Spirakis

11:30-11:55 Energy Management for Time-Critical Energy Harvesting Wireless Sensor Networks

Bo Zhang, Robert Simon, Hakan Aydin

11:55-12:00 Brief Announcement: Configuration of Actuated Camera Networks for Multi-target Coverage

Matthew P. Johnson, Amotz Bar-Noy, Mani Srivastava

12:00 – 13:30 Lunch

13:30 – 15:10 Session VI, Chaired by Gene Itkis

13:30-13:55 Stably Decidable Graph Languages by Mediated Population Protocols
Ioannis Chatzigiannakis, Othon Michail, Paul G. Spirakis

13:55-14:20 Broadcasting in Sensor Networks of Unknown Topology in the Presence of Swamping

Evangelos Kranakis, Michel Paquette

14:20-14:45 Self-Stabilizing Algorithm of Two-Hop Conflict Resolution

Stéphane Pomportes, Joanna Tomasik, Anthony Busson, Véronique Vèque

14:45-15:10 Chameleon-MAC: Adaptive and Self- \star Algorithms for Media Access Control in Mobile Ad hoc Networks

Pierre Leone, Marina Papatrantafileou, Elad M. Schiller, Gongxi Zhu

15:10 – 15:30 Coffee Break

15:30 – 17:10 Session VII, Chaired by Moti Yung

15:30-15:55 Connectivity-Preserving Scattering of Mobile Robots with Limited Visibility
Taisuke Izumi, Maria Gradinariu Potop-Butucaru, Sébastien Tixeuil

15:55-16:20 Computing in Social Networks

Andrei Giurgiu, Rachid Guerraoui, Kévin Huguenin, Anne-Marie Kermarrec

16:20-16:45 On Transactional Scheduling in Distributed Transactional Memory Systems

Junwhan Kim, Binoy Ravindran

16:45-17:10 Recursion in Distributed Computing

Eli Gafni, Sergio Rajsbaum

17:10 – 17:45 SSS Poster and Ramp Assembly, Chaired by Kirstie L. Bellman

18:00-20:00 SSS Conference Dinner, Faculty Club, Columbia University

WEDNESDAY SEPTEMBER 22 2010

09:00 – 10:00 SSS Invited Lecture III, Chaired by Jorge Cobb

A Geometry of Networks
Yechiam Yemini

10:00 – 10:15 Coffee Break

10:15 – 12:00 Session IIV, Chaired by Sergio Rajsbaum

- 10:15-10:40 On Adaptive Renaming under Eventually Limited Contention
Damien Imbs, Michel Raynal
- 10:40-11:05 RobuSTM: A Robust Software Transactional Memory
Jons-Tobias Wamhoff, Torvald Riegel, Christof Fetzer, Pascal Felber
- 11:05-11:30 A Provably Starvation-Free Distributed Directory Protocol
Hagit Attiya, Vincent Gramoli, Alessia Milani
- 11:30-11:55 Safe Flocking in Spite of Actuator Faults
Taylor Johnson, Sayan Mitra
- 11:55-12:00 Brief Announcement: Fast Convergence in Route-Preservation
Jorge A. Cobb

12:00 – 13:30 Lunch

13:30 – 15:10 Session IX, Chaired by Brian Coan

- 13:30-13:55 Approximation of δ -Timeliness
Carole Delporte-Gallet, Stéphane Devismes, Hugues Fauconnier
- 13:55-14:20 A Framework for Adaptive Optimization of Remote Synchronous CSCW in the Cloud Computing Era
Ji Lu, Yaoxue Zhang, Yuezhi Zhou
- 14:20-14:45 Low Memory Distributed Protocols for 2-Coloring
Amos Israeli, Mathew D. McCubbins, Ramamohan Paturi, Andrea Vattani

14:45 – 15:00 Coffee Break

15:00 – 16:15 Session X, Chaired by Oliver Theel

- 15:00-15:25 Dynamically Reconfigurable Filtering Architectures
Mathieu Valero, Luciana Arantes, Maria Gradinariu Potop-Butucaru, Pierre Sens
- 15:25-15:50 A Quantitative Analysis of Redundancy Schemes for Peer-to-Peer Storage Systems
Yaser Hourri, Bernhard Amann, Thomas Fuhrmann
- 15:50-16:15 A Framework for Secure and Private P2P Publish/Subscribe
Samuel Bernard, Maria Gradinariu Potop-Butucaru, Sébastien Tixeuil

16:15 – 16:30 Coffee Break

16:30 – 17:45 Session XI, Chaired by Jorge Cobb

- 16:30-16:55 A Comparative Study of Rateless Codes for P2P Persistent Storage
Heverson B. Ribeiro, Emmanuelle Anceaume
- 16:55-17:20 Snap-Stabilizing Linear Message Forwarding
Alain Cournier, Swan Dubois, Anissa Lamani, Franck Petit, Vincent Villain
- 17:20-17:45 Vulnerability Analysis of High Dimensional Complex Systems (Invited Paper)
Vedant Misra, Dion Harmon, Yaneer Bar-Yam

Drinks & Snacks Whishing a Great SSS 2011