The 25th International Symposium on
Stabilization, Safety, and Security (SSS 2023)
NJIT

Monday, October 2, 2023		
Time (local time GMT-4)	Program	Location
8:00-8:45	On-site registration	
8:45-9:00	Conference Opening	
9:00-10:00	Keynote Speaker 1: Alfred Spector *Algorithms and Beyond:* *What's Needed For Resilient Systems?*	
10:00-10:20	Coffee Break	
Morning Session 10:20-12:00	Session 1 Chair: Ryota Iguchi	
10:20-10:45 25 minutes	Track A Exploring Worst Cases of Self-stabilizing Algorithms using Simulations *Erwan Jahier, Karine Altisen and Stéphane Devismes*	
10:45-11:10 25 minutes	Track A Model Checking of Distributed Algorithms using Synchronous Programs *Erwan Jahier, Karine Altisen, Stéphane Devismes and Gabriel Sant'Anna*	
11:10-11:35 25 minutes	Track B The Fence Complexity of Persistent Sets *Gaetano Coccimiglio, Trevor Brown and Srivatsan Ravi*	
11:35-11:45 10 minutes	Track A - Brief Announcement Understanding Self-Stabilizing Node-Capacitated Overlay Networks Through Simulation *Winfred Afeaneku, Andrew Berns, Weston Kuchenberg, Sara Leisinger and Cedric Liu*	
11:45-11:55 10 minutes	Track B - Brief Announcement Byzantine-Tolerant Detection of Causality in Synchronous Systems *Anshuman Misra and Ajay Kshemkalyani*	
12:00-13:30	Lunch Break	
Afternoon Session 13:30-14:55	Session 2 Chair: Arya Gupta	

13:30-13:55 25 minutes	Track B - Invited Paper Time is not a Healer, but it Sure Makes Hindsight 20:20 *Eli Gafni and Giuliano Losa*	
13:55-14:20 25 minutes	Track B Adding Pull to Push Sum for Approximate Data Aggregation *Saptadi Nugroho, Alexander Weinmann and Christian Schindelhauer*	
14:20-14:30 10 minutes	Track C - Brief Announcement Efficient probabilistic approximations for Sign and Compare *Devharsh Trivedi*	
14:30-14:40 10 minutes	Track D - Brief Announcement Crash-tolerant Exploration by Energy Sharing Mobile Agents *Quentin Bramas, Toshimitsu Masuzawa and Sebastien Tixeuil*	
14:45-14:55 10 minutes	Track B - Brief Announcement Non-blocking Dynamic Unbounded Graphs with Wait-Free Snapshot *Gaurav Bhardwaj, Sathya Peri, and Pratik Shetty*	
15:00-15:20	Coffee Break	
Late Afternoon Session 15:20-16:35	Session 3 Chair: Sathya Peri	
15:20-15:45 25 minutes	Track B Byzantine Fault-Tolerant Causal Order Satisfying Strong Safety *Anshuman Misra and Ajay Kshemkalyani*	
15:45-16:10 25 minutes	Track B Improved Paths to Stability for the Stable Marriage Problem Vijay Garg and Changyong Hu	
16:10-16:35 25 minutes	Track B Lattice Linearity of Multiplication and Modulo *Arya Gupta and Sandeep Kulkarni*	
16:35-16:45	Coffee Break	
Evening Session 16:45-17:30	Session 4 Giuliano Losa	
16:45-17:10 25 minutes	Track D The Fagnano Triangle Patrolling Problem *Konstantinos Georgiou, Somnasth Kundu and Pawel Pralat*	
17:10-17:35 25 minutes	Track D	

	Constrained Backward Time Travel Planning *Quentin Bramas, Jean-Romain Luttringer and Sebastien Tixeuil*	
17:35	Business Meeting	
Tuesday, October 3, 2023		
8:00-8:45	On-site registration	
8:45-9:00	Conference Opening	
9:00-10:00	Keynote Speaker 2: Moti Yung	
10:00-10:20	Coffee Break	
Morning Session 10:20-12:00	Session 1	
10:20-10:45 25 minutes	Track B - Invited Paper Monotonicity and Opportunistically-Batched Actions in Derecho *Ken Birman, Sagar Jha, Mae Milano, Lorenzo Rosa, Weijia Song and Edward Tremel*	
10:45-11:10 25 minutes	Track B Robust Overlays meet Blockchains: On handling high churn and catastrophic failures *Vijeth Aradhya, Seth Gilbert and Aquinas Hobor*	
11:10-11:35 25 minutes	Track B Disconnected Agreement in Networks Prone to Link Failures *Bogdan Chlebus, Dariusz Kowalski, Jan Olkowski and Jedrzej Olkowski*	
11:35-12:00 25 minutes	Track B Wait-Free Updates and Range Search using Uruv *Gaurav Bhardwaj, Abhay Jain, Bapi Chatterjee, and Sathya Peri*	
12:00-13:30	Lunch Break	
Afternoon Session 13:30-15:10	Session 2 Chair: Sathya Peri	
13:30-13:55 25 minutes	Track C - Invited Paper Detection of False Data Injection Attacks in Power Systems Using a Secured-Sensors and Graph-Based Method *Gal Morgenstern, Lital Dabush, Jip Kim, James Anderson, Gil Zussman, and Tirza Routtenberg*	
13:55-14:20 25 minutes	Track B Synergistic Knowledge	

	Christian Cachin, David Lehnherr and Thomas Studer	
14:20-14:45 25 minutes	Track C KerberSSIze us: Providing Sovereignty to the People *Ronald Petrlic*	
14:45-15:10 25 minutes	Track C Where are the constants? New Insights On The Role of Round Constant Addition in The SymSum Distinguisher *Sahiba Suryawanshi and Dhiman Saha*	
15:10-15:30	Coffee Break	
Late Afternoon Session 15:30-16:45	Session 3 Chair: Dariusz Kowalski	
15:30-15:55 25 minutes	Track D Forbidden Patterns in Temporal Graphs Resulting from Encounters in a Corridor *Michel Habib, Minh-Hang Nguyen, Mikaël Rabie and Laurent Viennot*	
15:55-16:20 25 minutes	Track D Minimum Algorithm Sizes for Self-stabilizing Gathering and Related Problems of Autonomous Mobile Robots *Yuichi Asahiro and Masafumi Yamashita*	
16:20-16:45 25 minutes	Track D Meeting Times of Non-atomic *Ryota Eguchi, Fukuhito Ooshita, Michiko Inoue and Sébastien Tixeuil*	
16:45-17:05	Coffee Break	
Evening Session 16:35-18:05	Session 4 Chair: Gokarna Sharma	
17:05-17:30 25 minutes	Track D Separation of Unconscious Colored Robots *Hirokazu Seike and Yukiko Yamauchi*	
17:30-17:55 25 minutes	Track D Stand-Up Indulgent Gathering on Lines *Quentin Bramas, Sayaka Kamei, Anissa Lamani and Sebastien Tixeuil*	
17:55-18:20 25 minutes	Track D Dispersion of Mobile Robots in Spite of Faults *Debasish Pattanayak, Gokarna Sharma and Partha Sarathi Mandal*	
18:30	SSS 2023 Conference Banquet	

Wednesday, October 4, 2023		
8:00-8:45	On-site registration	
8:45-9:00	Conference opening	
9:00-10:00	Keynote Speaker 3: Maurice Herlihy *Rethinking Atomicity in the Blockchained World*	
10:00-10:20	Coffee Break	
Morning Session 10:20-11:35	Session 1 Chair: Avinash Kumar	
10:20-10:45 25 minutes	Track E Workflow Resilience For Mission Critical Systems *Mahmoud Abdelgawad, Indrakshi Ray and Tomas Vasquez*	
10:45-11:10 25 minutes	Track E Machine Learning-Based Phishing Detection Using URL Features: A Comprehensive Review *Asif Uz Zaman, Hossein Shirazi and Indrakshi Ray*	
Virtual Presentations		
11:10-11:35 25 minutes	Track E Invited Paper - Virtual How do humans succeed in tasks like proving Fermat's Theorem or predicting the Higgs boson? *Leonid Levin*	
11:35-12:00 25 minutes	Track C - Virtual Hierarchical Identity-Based Inner Product Functional Encryption for Unbounded Hierarchical Depth *Anushree Belel, Ratna Dutta and Sourav Mukhopadhyay*	
12:00-13:30	Lunch Break	
Afternoon Session	Session 2 Sebastien Tixeuil	
13:30-13:55 25 minutes	Track D - Virtual Privacy in Population Protocols with Probabilistic Scheduling *Talley Amir and James Aspnes*	

13:55-14:20 25 minutes	Track A - Virtual Self-stabilizing Byzantine-tolerant Recycling *Chryssis Georgiou, Michel Raynal and Elad Michael Schiller*	
14:20-14:45 25 minutes	Track C - Virtual Do Not Trust in Numbers: Practical Distributed Cryptography With General Trust *Orestis Alpos and Christian Cachin*	
14:45-15:10 25 minutes	Track C - Virtual Post-quantum Secure Stateful Deterministic Wallet from Code-based Signature featuring Uniquely Rerandomized Keys *Pratima Jana and Ratna Dutta*	
15:10-15:35 25 minutes	Track C - Virtual Square Attacks on Reduced-Round FEA-1 and FEA-2 *Abhishek Kumar, Amit Kumar Chauhan and Somitra Kumar Sanadhyabi*	
15:35-15:45	Coffee Break	
15:45-16:10 25 minutes	Track D - Virtual Asynchronous Silent Programmable Matter: Line Formation *Alfredo Navarra and Francesco Piselli*	
16:10-16:35 25 minutes	Track D - Virtual Uniform k-Circle Formation by Fat Robots *Bibhuti Das and Krishnendu Mukhopadhyaya*	
16:35-17:00 25 minutes	Track B - Virtual Exploring Trade-offs in Partial Snapshot Implementations *Nikolaos Kallimanis, Eleni Kanellou, Vasiliki Liagou and Charidimos Kiosterakis*	
17:00-17:25 25 minutes	Track D - Virtual Time-optimal Geodesic Mutual Visibility of Robots on Grids Within Minimum Area	

	Serafino Cicerone, Alessia Di Fonso, Gabriele Di Stefano and Alfredo Navarra	
17:25-17:35	Coffee Break	
17:35-18:00 25 minutes	Track D – Virtual Brief Announcement Asynchronous Gathering of Finite Memory Robots on a Circle under Limited Visibility *Satakshi Ghosh, Pritam Goswami, Avisek Sharma, and Buddhadeb Sau*	
18:00-18:25 25 minutes	Track D – Virtual Brief Announcement Rendezvous on a Known Dynamic Point in a Finite Unoriented Grid *Pritam Goswami, Avisek Sharma, Satakshi Ghosh and Buddhadeb Sau*	
18:25	Concluding Remarks	