

August 19, 2026 Wednesday				
8:30-9:00	Light breakfast			
9:00-9:10	Opening remarks RANDOM (PHO 206) - Tom Gur; APPROX (PHO 203) - Mohit Singh			
	Session A1			
	RANDOM — Streaming & Sketching		APPROX — Clustering	
9:10-9:30	Output-Sparse Matrix Multiplication Using Compressed Sensing	Huck Bennett, Karthik Gajulapalli, Alexander Golovnev and Evelyn Warton	A Configuration-LP Framework for Connected k-Median Clustering	Kushagra Chatterjee, Rojin Rezvan and Ali Vakilian
9:30-9:50	On the LSH Distortion of Ulam and Cayley Similarities	Flavio Chierichetti, Mirko Giacchini, Ravi Kumar and Erasmo Tani	Socially Fair Clustering: Parameterized Approximation and Local Search	Aditya Anand, Yury Makarychev and Liren Shan
9:50-10:10	High Probability Streaming Lower Bounds for F_2 Estimation	William Swartworth, David Woodruff and Samson Zhou	Incremental Consistent k-Center Clustering	Mara Grilnberger and Antonis Skarlatos
10:10-10:30	On the Advantage of Adaptivity for Sampling with Cell Probes	Farzan Byramji, Daniel Kane, Jackson Morris and Anthony Ostuni	Approximating (Weighted) Chromatic Correlation Clustering via Cluster LP	Fateme Abbasi, Hyung-Chan An, Jarosław Byrka, Changyeol Lee and Yongho Shin
10:30-11:00	Coffee			
	Session A2			
	RANDOM — Distribution Testing & Sampling		APPROX — CSPs and Hardness of Approximation	
11:00-11:20	Tight simulation of a distribution using conditional samples	Tomer Adar	Hardness of the Binary Covering Radius Problem in Large ℓ_p Norms	Huck Bennett and Peter Ly
11:20-11:40	Distributed Gaussian Mean Testing under Communication Constraints: messages, samples, and coins	Clément Canonne and Nimitt	Threshold Rounding and Bounded-Degree Boolean MAX 2-CSP	Suprovat Ghoshal, Neng Huang, Euiwoong Lee, Konstantin Makarychev and Yury Makarychev
11:40-12:00	Entropy Equivalence Testing	Clément Canonne, Yash Pote, Jonathan Scarlett and Qiping Yang	On the Approximability of Parameterized Minimum Monotone Satisfying Assignment	Venkatesan Guruswami, Bingkai Lin, Xuandi Ren and Xin Zheng
12:00-12:20	On Computing Total Variation Distance Between Mixtures of Product Distributions	Weiming Feng, Yucheng Fu, Minji Yang and Anqi Zhang	Strong Inapproximability for a Promise Rank Problem	Venkatesan Guruswami, Xuandi Ren and Shaoxuan Tang
12:20-2:00	Lunch (on your own or Junior/Senior Lunch)			
2:00-3:00	Plenary Talk - RANDOM (PHO 206), Chair: Tom Gur			
	Madhu Sudan (Harvard University)			
3:00-3:15	Coffee			
	Session A3			
	RANDOM — Local & Randomized Algorithms		APPROX — Matroid and Submodular Optimization	
3:15-3:35	Load Balancing under Adaptive Bin Deletions	Haim Kaplan, Shay Sapir and Uri Stemmer	Tight Approximation Results for Matroid Optimization with a Linear Constraint	Ilan Doron-Arad, Hadas Shachnai and Gilad Shmerler
3:35-3:55	Recovering Planted Colorings in Sublinear Time	Weronika Wrzos-Kaminska	Approximation Algorithms for Matroidal Prerequisite Systems	Robert Streit and Vijay Garg
3:55-4:15	Improved Local Computation of Edge Orientation	Reut Levi and Bar Rushkin	Online Matching with Size-Based and Convex Delays	Junhao Gan, Xiao Sun and Seeun William Umboh
4:15-4:45	Break			
	Session A4			
	RANDOM — Sublinear Graph Algorithms		APPROX — Approximation Algorithms	
4:45-5:05	When Local and Non-Local Meet: Quadratic Improvement for Edge Estimation with Independent Set Queries	Tomer Adar, Yahel Hotam and Amit Levi	Bi-Lipschitz extensions and outlier embeddings into trees	Kristin Sheridan, Shuchi Chawla, Arnold Filtser and Yoni Trachtenberg

5:05-5:25			The Code Distortion Problem	Huck Bennett, Matthew Fox and Bryant Morrell
5:25-5:45			Improved Approximation Algorithm for Maximum Balanced Biclique	Pasin Manurangsi
6:00-8:00	Banquet (CDS 1750)			
August 20, 2026 Thursday				
8:45-9:10	Light breakfast			
	Session B1			
	RANDOM — Property Testing of Functions and Their Representations		APPROX — Geometric Algorithms	
9:10-9:30	Property Testing of Computational Networks	Artur Czumaj and Christian Sohler	Incremental Dominating Set	Jonathan Gal, Seffi Naor and Ilan Doron-Arad
9:30-9:50	Testing k-submodularity	Themistoklis Haris and Diptaksho Palit	Optimal Stable Coresets for Geometric Median via Uniform Sampling	Amir Carmel, Robert Krauthgamer and Nir Petruschka
9:50-10:10	Homomorphism Testing with Resilience to Online Manipulations	Esty Kelman, Uri Meir, Debanuj Nayak and Sofya Raskhodnikova	Bichromatic Geometric Spanners	Theodore Fung and Csaba Tóth
10:10-10:30	Learning and Testing Convex Functions	Renato Ferreira Pinto Jr., Cassandra Marcussen, Elchanan Mossel and Shivam Nadimpalli	Hitting Axis-Parallel Segments with Weighted Points	Rajiv Raman, Siddhartha Sarkar and Jatin Yadav
10:30-11:00	Coffee			
	Session B2			
	RANDOM — Property Testing		APPROX — Graph Algorithms	
11:00-11:20	Towards tight bounds for testing k-colorability	Asaf Shapira and Nick Kushnir	Near-optimal streaming approximation for Max-DICUT in sublinear space using two passes	Santhoshini Velusamy
11:20-11:40	Unbounded-width CSPs are Untestable in a Sublinear Number of Queries	Yumou Fei	Capacitated Partition Vertex Cover and Partition Edge Cover	Rajni Dabas, Samir Khuller and Emilie Rivkin
11:40-12:00	Testing Unate Distributions	Daeho Lee, Shivam Nadimpalli, Mingda Qiao and Ronitt Rubinfeld	Directed Low Diameter Decomposition for Structured Digraphs	Shinwoo An and Arnold Filtser
12:00-12:20	Testing the Independent Set Property in Hypergraphs	Elena Grigorescu, Shreya Nasa and Cameron Seth	Approximation Algorithms for Discounted Graph Search with Norm Objectives	Svenja M. Griesbach, Felix Hommelsheim and Max Klimm
12:20-2:00	Lunch (on your own or Junior/Senior Lunch)			
	Session B3			
	RANDOM — Markov Chains & Spin Systems		APPROX — Network Design and Connectivity	
2:00-2:20	Glauber dynamics for random field Ising models on bounded degree graphs	Yi Han	Improved Approximation Algorithms for bounded-length Path Augmentation	Felix Hommelsheim
2:20-2:40	Markov Chains with Rewinding	Amir Azarmehr, Soheil Behnezhad, Alma Ghafari and Madhu Sudan	A Bad Example for Jain’s Iterative Rounding Theorem for the Cover Small Cuts Problem	Miles Simmons, Ishan Bansal and Joe Cheriyan
2:40-3:00	Mixing and cutoff for the systematic scan dynamics of the mean-field ferromagnetic Potts model	Antonio Blanca and Md Tahmidur Rafid	Length-Constrained Network Design in Planar Digraphs	Chandra Chekuri and Rhea Jain
3:00-3:20	Parallel Sampling from the Ising p-Spin Model	Alireza Haqi, Aniket Das and Nima Anari	Uncrossed Multiflows and Applications to Disjoint Paths	Chandra Chekuri, Guylain Naves, Joseph Poremba and Bruce Shepherd
3:20-3:50	Coffee			
	Session B4			
	RANDOM — Codes & Complexity (PHO 206)		RANDOM — Random Structures& Quantum Algorithms (PHO 203)	
3:50-4:10	An Improved Construction of Variety-Evasive Subspace Families	Robert Andrews and Abhibhav Garg	Almost all graphs are vertex-minor universal	Ruben Ascoli, Bryce Frederickson, Sarah Frederickson, Caleb McFarland and Logan Post

4:10-4:30	Lifting Polynomials Using Error-Correcting Codes	Ivan Hu and Dieter van Melkebeek	Algorithmic Phase Transition for Large Independent Sets in Dense Hypergraphs	Abhishek Dhawan, Nhi Dinh, Eren C. Kizildag, Neeladri Maitra and Bayram Alp Sahin
4:30-4:50	Fast list recovery of univariate multiplicity codes	Rohan Goyal, Prahladh Harsha, Mrinal Kumar and Ashutosh Shankar	Quantum algorithms for path and cycle containment problems	Arjan Cornelissen, Amin Shiraz Gilani and Subhasree Patro
4:50-5:10	QMA Lower Bounds for Batch Verification via Approximate Degree	Mandar Juvekar, Mark Bun and Samuel King	Approximate Cauchy-Schwarz Inequality and Improved Bounds for Sherali-Adams Refutation of Semirandom CSPs	Pravesh K. Kothari and Andrew D. Lin
5:10-5:30	Fine-Grained Complexity via Quantum Natural Proofs	Yanlin Chen, Yilei Chen, Rajendra Kumar, Subhasree Patro and Florian Speelman	Local algorithms and the failure of log-depth quantum advantage on sparse random CSPs	Antares Chen, Neng Huang and Kunal Marwaha
6:00-8:00	ESTIMATION by Jane Street (Photonics 9th floor). Separate RSVP is required			

August 21, 2026 Friday				
8:45-9:05	Light breakfast			
	Session C1			
	RANDOM — Coding Theory & Lattices		APPROX — Online Algorithms	
9:05-9:25	One-Sided-Error Parameterized Reductions for the Minimum Distance and Shortest Vector Problems	Shuichi Hirahara and Kazuki Ogitsuka	Stochastic Caching via Subset Entropy	Ravi Kumar, Roie Levin, Seffi Naor and Debmalya Panigrahi
9:25-9:45	An Elementary Proof of the First LP Bound on the Rate of Binary Codes	Elyassaf Loyfer and Nati Linial	Improved Algorithms and Lower Bounds for Parametrized Metrical Service Systems	Junhao Gan, Xiao Sun and Seeun William Umboh
9:45-10:05	Locality of Curve Decoding and Improved Proximity Gaps	Rohan Goyal, Venkatesan Guruswami, Yihang Sun and Mary Wootters	Cycle Cancellation for Submodular Fractional Allocations and Applications	Chandra Chekuri, Pooja Kulkarni, Ruta Mehta and Jan Vondrák
10:05-10:25	Good Locally Testable Codes with Small Alphabet and Small Query Size	Uriya First and Stav Lazarovici	Online TCP Acknowledgment under General Delays	Sujoy Bhore, Michał Pawłowski and Seeun William Umboh
10:25-10:55	Coffee			
10:55-11:00	Presentation about open access journal TheoretiCS, Chair: Mohit Singh (PHO 206) - Artur Czumaj			
11:00-12:00	Plenary Talk - APPROX (PHO 203) , Chair: Mohit Singh			
	Chandra Chekuri (University of Illinois, Urbana-Champaign)			
12:00-1:40	Lunch (on your own or Junior/Senior Lunch)			
	Session C2			
	RANDOM — Pseudorandomness & Extractors (PHO 206)		RANDOM — Expanders (PHO 203)	
1:40-2:00	Hard-to-Sample Distributions from Robust Extractors	Farzan Byramji, Daniel Kane, Jackson Morris and Anthony Ostuni	Two-Sided Lossless Expanders in the Unbalanced Setting	Eshan Chattopadhyay, Mohit Gurumukhani, Noam Ringach and Yunya Zhao
2:00-2:20	Improved Error Reduction for Weighted PRGs	Ben Chen, Gil Cohen, Dean Doron, Yuval Khaskelberg and Amnon Ta-Shma	Sequential Sweeps and High Dimensional Expansion	Vedat Levi Alev and Ori Parzanchevski
2:20-2:40	One-Way Functions and Polynomial-Time Dimension	Satyadev Nandakumar, Subin Pulari, Akhil S and Suronjona Sarma	Ultra-Sparse Expanders and the Free Method	Gal Maor and Gil Cohen
2:40-3:00	Symmetric Distributions from Shallow Circuits	Daniel Kane, Anthony Ostuni and Kewen Wu	Toward a KKL Theorem for any HDX	Max Hopkins

