Program

APPROX + RANDOM 2010 Program
September 1st

8h-9h Registration desk open

Note: The registration Desk will be open on every break during the conference period

9h-10h50am (Random)

- Oded Goldreich. On Testing Computability by Small Width OBDDs
- Noga Alon and Eric Blais. Testing boolean function isomorphism
- Yuichi Yoshida and Hiro Ito. Testing Outerplanarity of Bounded Degree Graphs
- Dana Ron and Elya Dolev. Distribution-Free Testing Algorithms for Monomials with a Sublinear Number of Queries

10h50-11h15am Coffee Break

11h15 -1h10pm (Approx)

- Leslie A Goldberg (invited talk). Approximating the Tutte polynomial of a graph
- Per Austrin. Improved Inapproximability For Submodular Maximization
- Preyas Popat, Subhash Khot and Rishi Saket. Approximate Lasserre Integrality Gap for Unique Games
- Mahdi Cheraghchi, Johan Hastad, Marcus Isaksson and Ola Svensson. Approximating Linear Threshold Predicates

1h10pm-2h30pm Lunch

2h30pm-4h20pm (Random)

- Arie Matsliah, Jop Briet, Sourav Chakraborty and David Garci’a-Soriano. Monotonicity Testing and Shortest-Path Routing on the Cube
- Arnab Bhattacharyya, Elena Grigorescu, Madhav Jha, Kyomin Jung, Sofya Raskhodnikova and David Woodruff. Lower Bounds for Local Monotonicity Reconstruction from Transitive-Closure Spanners
- Funda Ergun, Hossein Jowhari and Mert Saglam. Periodicity in Streams
- Rasmus R. Amossen, Andrea Campagna and Rasmus Pagh. Better size estimation for sparse matrix products
4h20pm-4h45pm Coffee Break

4h45pm-6h35pm (Approx)

- Mohammad Hossein Bateni and Julia Chuzhoy. Approximation Algorithms for the Directed k-Stroll and k-Tour Problems
- Hyung-Chan An, Robert D. Kleinberg and David B. Shmoys. Approximation Algorithms for the Bottleneck Asymmetric Traveling Salesman Problem
- Igor Gorodezky, Robert Kleinberg, David Shmoys and Gwen Spencer. Improved lower bounds for the universal and a priori TSP
- Mohammad Taghi Hajiaghayi, Rohit Khandekar, Guy Kortsarz and Julian Mestre. The Checkpoint Problem
- Thomas Erlebach and Erik Jan van Leeuwen. PTAS for Weighted Set Cover on Unit Squares

9h30pm Conference dinner

Restaurant: El Tunel del Port
Address: Moll de Gregal 12, at the Olympic Harbor

September 2nd

9h-10h50am (Approx)

- Mohammad Hossein Bateni, Mohammad Taghi Hajiaghayi and Morteza Zadimoghaddam. Submodular Secretary Problem and Extensions
- Spyros Kontogiannis and Paul Spirakis. Exploiting Concavity in Bimatrix Games: New polynomially tractable subclasses
- Piotr Berman and Sofya Raskhodnikova. Approximation Algorithms for Min-Max Generalization Problems
- Kirk Pruhs and Clifford Stein. How To Schedule When You Have To Buy Your Energy
- Gruia Calinescu. Min-Power Strong Connectivity

10h50-11h15am Coffee Break

11h15 -1h10pm (Random)

- Oded Goldreich (Invited talk). Some Thoughts regarding Unconditional Derandomization
- Russell Impagliazzo and Valentine Kabanets. Constructive Proofs of Concentration Bounds
- Elazar Goldenberg and Irit Dinur. The Structure of Winning Strategies in Parallel Repetition Games
o David Steurer. Improved Rounding for Parallel Repeated Unique Games

1h10pm-2h30pm Lunch

2h30pm-4h20pm (Approx)

o Irit Dinur and Igor Shinkar. On the Conditional Hardness of Coloring a 4-colorable Graph with Super-Constant Number of Colors
o Prasad Chebolu, Leslie Ann Goldberg and Russell Martin. The Complexity of Approximately Counting Stable Matchings
o Evdokia Nikolova. Approximation Algorithms for Reliable Stochastic Combinatorial Optimization
o Matthias Englert, Anupam Gupta, Robert Krauthgamer, Harald Raecke, Inbal Talgam and Kunal Talwar. Vertex Sparsifiers: New Results from Old Techniques
o Eden Chlamtac, Robert Krauthgamer and Prasad Raghavendra. Approximating Sparsest Cut in Graphs of Bounded Treewidth

4h20pm-4h45pm Coffee Break

4h45pm-6h57pm (Random)

o Parikshit Gopalan and Rocco Servedio. Learning and Lower Bounds for AC0 with Threshold Gates
o Anindya De, Omid Etesami, Luca Trevisan and Madhur Tulsiani. Improved Pseudorandom Generators for Depth 2 Circuits
o Eric Allender, V Arvind and Fengming Wang. Uniform Derandomization from Pathetic Lower Bounds
o Roy Kasher and Julia Kempe. Two-source Extractors Secure Against Quantum Adversaries
o Piotr Indyk and Stanislaw Szarek. Almost-Euclidean subspaces of ell_1^N via tensor products: a simple approach to randomness reduction
o Aaron Roth. Differential Privacy and the Fat-Shattering Dimension of Linear Queries

September 3rd

9h-10h50am (Random)

o Nikolaos Fountoulakis and Konstantinos Panagiotou. Rumor spreading on random regular graphs and expanders
o Amin Coja-Oghlan, Mikael Onsjo and Osamu Watanabe. Propagation Connectivity of Random Hypergraphs
Nayantara Bhatnagar, Allan Sly and Prasad Tetali. Reconstruction threshold for the hardcore model
Thomas Hayes and Alistair Sinclair. Liftings of Tree-Structured Markov Chains
Alistair Sinclair and Dan Vilenchik. Delaying satisfiability for random 2SAT

10h50-11h15am Coffee Break

11h15 -1h05pm (Approx)
Ishay Haviv and Oded Regev. The Euclidean Distortion of Flat Tori
Lee-Ad Gottlieb and Tyler Neylon. Matrix sparsification and the sparse null space problem
Ken-ichi Kawarabayashi and Yusuke Kobayashi. Improved Algorithm for the Half-Disjoint Paths Problem
Guyslain Naves, Nicolas Sonnerat and Adrian Vetta. Maximum Flows on Disjoint Paths
Ken-ichi Kawarabayashi and Yusuke Kobayashi. An O(log n)-approximation algorithm for the disjoint paths problem in Eulerian planar graphs and 4-edge-connected planar graphs

1h10pm-2h30pm Lunch

2h30pm-4h20pm (Random)
Tali Kaufman and Michael Viderman. Locally Testable vs. Locally Decodable Codes
Eli Ben-Sasson and Michael Viderman. Low Rate Is Insufficient for Local Testability
David Woodruff. A Quadratic Lower Bound for Three-Query Linear Locally Decodable Codes over Any Field
Atri Rudra and Steve Uurtamo. Two Theorems on List Decoding
Thomas Watson. Relativized Worlds Without Worst-Case to Average-Case Reductions for NP

4h20pm-4h45pm Coffee Break

4h45pm-6h35pm (Approx)
Mohit Singh and Kunal Talwar. Improving Integrality Gaps via \chvatal-Gomory Rounding
Lee-Ad Gottlieb and Robi Krauthgamer. Proximity algorithms for nearly-doubling spaces
Frank Kammer, Heiko Voepel and Torsten Tholey. Approximation Algorithms for Intersection Graphs
Piotr Indyk, Avner Magen, Anastasios Sidiropoulos and Anastasios Zouzias. On-line Embeddings
Victor Chepoi, Feodor Dragan, Ilan Newman, Yuri Rabinovich and Yann Vaxes. Constant approximation algorithms for embedding graph metrics into trees and outerplanar graphs