AofA'10

21st International Meeting on Probabilistic, Combinatorial and Asymptotic Methods for the Analysis of Algorithms

Conference Program

Vienna, Austria
June 28 - July 2, 2010

(Venue: Lecture Hall FH8, Wiedner Hauptstrasse 8-10, 1040 Wien)

Monday, June 28, 2010

08:00-09:30:	Registration
09:30-10:00:	Opening
10:00-11.00:	**Noga Alon. Color Coding: Variations and Applications**
11.00-11.30:	Coffee Break
11:30-12:00:	James Allen Fill. **Distributional Convergence fot the Number of Symbol Comparisons used by Quick Sort.**
12:00-12:30:	Conrado Martinez and Uwe Roesler. **Partial Quicksort and Quickpartitionsort.**
12:30-13:00:	Matthew Roberts. **Almost sure asymptotics for the random binary search tree.**
13:00-15:00:	Lunch Break
15:00-15:30:	David Laferrière, Daniel Panario and Jason Gao. **Asymptotics of Decomposable Combinatorial Structures of Alg-Log Type With Positive Log Exponent.**
15:30-16:00:	Johannes Morgenbesser. **Square root singularities of infinite systems of functional equations.**
16:00-16:30:	Mark Daniel Ward. **Asymptotic Rational Approximation To Pi: Resolving An „Unsolved Problem" Posed By Herbert Wilf.**
16:30-17:00:	Coffee Break
17:00-17:30:	Carlos Hoppen. **The analysis of a prioritised probabilistic algorithm to find large induced forests in reguar graphs with large girth.**
17:30-18:00:	Uriel Feige and Dorit Ron. **Finding hidden cliques in linear time.**
18:00-18:30:	Aris Anagnostopoulos, Clement Dombry, Nadine guillotin-Plantard, Ioannis Konotoyiannis and Eli Upfal. **Stochastic Analysis of the k-Server Problem on the Circle.**
19:00	Welcome Reception im Festsaal (TU main building, Karlspaltz 5)

Tuesday, June 29, 2010

09:30-10:30:	**Yuliy Baryshnikov. Search on the brink of chaos.**
10:30-11:00:	Coffee Break
11:00-11:30:	Philippe Flajolet, Mathieu Roux and Brigitte Vallee. **Digital Trees and Memoryless Sources .**
11:30-12:00:	Svante Janson. **Renewal theory in analysis of tries and strings.**
12:00-12:30:	Guy Louchard, Svante Janson and Anders Martin-Löf. **The maximum of Brownian motion with with parabolic drift.**
12:30-13:00:	Alexander Gnedin, Alexander Iksanov and Alexander Marynych. **The Bernoulli sieve.**
13:00-15:00:	Lunch Break
15:00-15:30:	Yann Ponty and Olivier Bodini. **Multi-dimensional Boltzmann Sampling of Languages.**
15:30-16:00:	Dominique Gouyou-Beauchamps and Cyril Nicaud. **Random Generation Using Binomial Approximations.**
16:00-16:30:	Lucas Gerin. **Random sampling of lattice paths with constraints, via transportation.**
16:30-17:30:	Poster Session & extended Coffee Break
17:30-18:00:	Antoine Genitrini and Bernhard Gittenberger. **No Shannon effect on probability distributions on Boolean functions induced by random expressions.**
18:00-18:30:	Lev Gordeev and Andreas Weiermann. **Phase transitions in proof theory.**

Wednesday, June 30, 2010

09:30-10:30:	**Peter Winkler. The Automaton as Statistician**
10:30-11:00:	Coffee Break
11:00-11:30:	Thomas Feierl. **Asymptotics for Walks in a Weyl chamber of Type B.**
11:30-12:00:	Cédric Loi, Coumède Paul-Henry and Jean Francon. **A symbolic method to compute the probability distribution of the number of pattern occurences in random texts generated by stochastic OL-systems.**
12:00-12:30:	Cyril Banderier and Pierre Nicodème. **Bounded discrete excursions.**
12:30-13:00:	Philippe Jacquet, Charles Knessel and Wojciech Szpankowski. **Counting Markov Types.**

Thursday, July 1, 2010

09:30-10:30:	**Oliver Riordan. Percolation on graphs.**
10:30-11:00:	Coffee Break
11:00-11:30:	Guillaume Chapuy, Eric Fusy, Omer Gimenez and Marc Noy. **On the diameter of random planar graphs.**
11:30-12:00:	Jason Gao and Gilles Schaeffer. **The distribution of the number of small cuts in a random planar.**
12:00-12:30:	Mohammed Abdullah, Colin Cooper and Alan Frieze. **Cover time of a random graph with given degree.**
12:30-13:00:	Veronika Kraus. **The degree distribution in unlabelled 2-connected graph families.**
13:00-15:00:	Lunch Break
15:00-15:30:	Luc Devroye, Omar Fawzi and Nicolas Fraiman. **The height of scaled attachment random recursive trees.**
15:30-16:00:	Alois Panholzer and Georg Seitz. **Ordered increasing k-trees: Introduction and analysis of a preferential attachment network model.**
16:00-16:30:	Gölz Olaf Munsonius. **The total Steiner k-distance for b-ary recursive trees and linear recursive trees.**
16:30-17:00:	Coffee Break
17:30-18:00:	Stephan Wagner. **On unary nodes in tries.**
18:00-18:30:	Philippe Jacquet and Paul Muhlethaler. **Geometric Bucket Trees: Analysis of Linear Bucket Trees.**
18:30-19:00:	Michael Fuchs. **The variance for partial match retrievals in k-dimensional bucket digital trees**
19:30	Conference Dinner at „Heuriger Fuhrgasslhuber"
22.30-23.00:	Buses will bring participants back to the centre of Vienna

Friday, July 2, 2010

10:00-11:00:   **Daniel Panario. Polynomials over Finite Fields: Algorithms and Randomness**

11:00-11:15:   Coffee Break

11:15-11:45:   Jérémie Lumbroso.
                  An optimal cardinality estimation algorithm based on order statistics and its full analysis.

11:45-12:15:   Jakub Kozik.
                  Dynamic Threshold Strategy for Universal Best Choice Problem.

12:15-12:45:   Yun Kuen Cheung and Mordecai Golin.
                  Analyzing a Weighted Digital Sum Variant.

12:45-13:15:   Bergfinnur Durhuus and Soeren Eilers.
                  Combinatorial aspects of pyramids of one-dimensional pieces of fixed integer length.

13:15-15:00:   Lunch Break

15:00-15:30:   Páidi Creed and Mary Cryan.
                  The number of Euler tours of random d-in/d-out graphs.

15:30-16:00:   Kunal Dutta and C.R. Subramanian.
                  Induced acyclic subgraphs in random digraphs: Improved bounds.

16:00-16:30:   Thomas Fernique and Damien Regnault.
                  Stochastic flips on dimertilings.

16:30-17:00:   Coffee Break

17:30-18:00:   Stephen Chestnut and Manuel Lladser.
                  Occupancy distributions in Markov chains via Doeblin‛s ergodicity coefficient.

18:00-18:30:   Jacek Cichon and Marek Klonowski.
                  A Note on Invariant Random Variables.

                  Closing of Conference