

# FCRC 2011

June 4 - 11, San Jose, CA

# TIMELINE SCHEDULE

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## CONFERENCE/WORKSHOP/EVENT ACRONYMS & DATES

	Dates	Full Name		Dates	Full Name
<b>3DAPAS</b>	8 A	Workshop on Dynamic Distrib. Data-Intensive Applications, Programming Abstractions, & Systs (HPDC)	<b>IWQoS</b>	6--7	Int. Workshop on Quality of Service (ACM SIGMETRICS and IEEE Communications Society)
<b>A4MMC</b>	4	Applications fo Multi and Many Core Processors: Analysis, Implementation, and Performance (ISCA)	<b>LSAP</b>	8 P	Workshop on Large-Scale System and Application Performance (HPDC)
<b>AdAuct</b>	5	Ad Auction Workshop (EC)	<b>MAMA</b>	8	Workshop on Mathematical Performance Modeling and Analysis (METRICS)
<b>AMAS-BT</b>	4 P	Workshop on Architectural and Microarchitectural Support for Binary Translation (ISCA)	<b>METRICS</b>	7--11	ACM SIGMETRICS International Conference on Measurement and Modeling of Computer Systems
<b>BMD</b>	5	Workshop on Bayesian Mechanism Design (EC)	<b>MoBS</b>	5 A	Workshop on Modeling, Benchmarking, and Simulation (ISCA)
<b>CARD</b>	5 P	Workshop on Computer Architecture Research Directions (ISCA)	<b>MRA</b>	8	Int. Workshop on MapReduce and its Applications (HPDC)
<b>CBP</b>	4 P	JILP Workshop on Computer Architecture Competitions: Championship Branch Prediction (ISCA)	<b>MSPC</b>	5	Memory Systems Performance and Correctness (PLDI)
<b>Complex</b>	8--10	IEEE Conference on Computational Complexity (IEEE TCMFC)	<b>NDCA</b>	5 A	New Directions in Computer Architecture (ISCA)
<b>CRA-W</b>	4--5	CRA-W Career Mentoring Workshop	<b>NetEcon</b>	6	Workshop on the Economics of Networks, Systems, and Computation (EC)
<b>DIDC</b>	8 P	Int. Workshop on Data-Intensive Distributed Computing (HPDC)	<b>PLAS</b>	5	Programming Languages and Analysis for Security Workshop (PLDI)
<b>EAMA</b>	4	Workshop on Emerging Applications and Manycore Architectures (ISCA)	<b>PLDI</b>	4--8	ACM SIGPLAN Conference on Programming Language Design and Implementation
<b>EC</b>	5--9	ACM Conference on Electronic Commerce (ACM SIGECOM)	<b>PODC</b>	6--8	ACM SIGACT-SIGOPT Symp. on Principles of Distributed Computing
<b>ECMLS</b>	8 A	Int. Emerging Computational Methods for the Life Sciences Workshop (HPDC)	<b>SciCloud</b>	8	Workshop on Scientific Cloud Computing (HPDC)
<b>EON</b>	4	Network Optimized Computing at the Edge of the Network (ISCA)	<b>SCUGC</b>	5	Workshop on Social Computing and User Generated Content (EC)
<b>Evaluate</b>	5	Experimental Evaluation of Software and Systems in Computer Science (PLDI)	<b>SNC</b>	7--9	Symbolic Numeric Computation (ACM SIGSAM)
<b>EXADAPT</b>	5 A	Int. Workshop on Adaptive Self-Tuning Systems for the Exaflop Era (PLDI)	<b>SPAA</b>	4--6	ACM Annual Symposium on Parallelism in Algorithms and Architectures (ACM SIGACT & SIGARCH)
<b>FASPP</b>	5 P	Future Architectural Support for Parallel Programming (ISCA)	<b>STOC</b>	6--8	ACM Symposium on Theory of Computing (ACM SIGACT)
<b>FOMC</b>	9	ACM SIGACT-SIGMETRICS Int. Workshop on Foundations of Mobile Computing	<b>TRANSACTION</b>	5	Workshop on Transactional Computing (ACM SIGPLAN) -- OPEN
<b>Green</b>	7 P	GreenMetrics (METRICS)	<b>VTDC</b>	8 P	Virtual Technologies in Distributed Systems (HPDC)
<b>HPDC</b>	8--11	ACM Symp. on High-Performance Parallel and Distributed Computing (ACM SIGARCH)	<b>WDDD</b>	5 A	Workshop on Duplicating, Deconstructing, and Debunking (ISCA)
<b>ISCA</b>	4--8	International Symposium on Computer Architecture (ACM SIGARCH & IEEE-TCCA)	<b>WEED</b>	5	Workshop on Energy-Efficient Design (ISCA)
<b>ISMM</b>	4--5	Int. Symp. on Memory Management (ACM SIGPLAN)	<b>WIT</b>	6	Workshop on Implementation Theory (EC)
<b>ISSAC</b>	8--11	Int. Symp. on Symbolic and Algebraic Computation (ACM SIGSAM)	<b>X10</b>	4	X10: Performance and Productivity at Scale (PLDI)

For affiliated workshops, the main event to which they are affiliated is given in parentheses. Dates include affiliated tutorials, but not affiliated workshops.

# SPECIAL EVENTS not on Timeline Schedules

(NOTE: Conference-specific special events are typically open only to those who have registered for the conference in question, and the ACM Awards Banquet is for ticket holders only. Poster sessions are open to all.)

Friday, June 3	Saturday, June 4	Sunday, June 5	Monday, June 6	Tuesday, June 7	Wednesday, June 8	Thursday, June 9	Friday, June 10
<p><b>SPAA Reception</b> 7:00 - 9:00 pm Crowne Plaza - Miro Lounge</p>	<p><b>ACM Awards Banquet</b> 6:00 - 10:00 pm Fairmount Hotel</p> <p><b>ISMM Reception</b> 6:00 - 8:00 pm A1</p>	<p><b>ACM Turing Award Lecture</b> 6:00 - 7:15 pm Exhibit Hall 1</p> <p><b>CRA-W Twenty Year Celebration</b> 7:30 - 10:00 pm Marriott - Ballrooms 5 &amp; 6</p> <p><b>SPAA Banquet/Business Meeting</b> 7:30 - 10:00 pm Crowne Plaza - Plaza C</p> <p><b>ISCA Reception</b> (Sponsored by Google) 7:30 - 9:30 pm Almaden Concourse</p> <p><b>PLDI Reception</b> 7:30 - 9:30 pm Marriott - Ballrooms 3 &amp; 4</p> <p><b>PODC Reception</b> 7:30 - 9:30 pm Crowne Plaza - Miro Lounge</p> <p><b>STOC Reception</b> 7:30 - 9:30 pm Hilton Almaden Ballroom</p>	<p><b>PLDI Awards Luncheon</b> 12:30 - 1:30 pm Exhibit Hall 3</p> <p><b>ISCA Banquet and Excursion</b> 6:00 - 9:00 pm (Buses leave at 5:15) The Mountain Winery</p> <p><b>IWQoS Banquet</b> 7:00 - 9:00 pm Fairmount - Atherton Room</p> <p><b>PODC Business Meeting</b> 6:00 - 8:00 pm C2 &amp; C3</p> <p><b>STOC Poster Session</b> 8:30 - 10:30 pm Concourse</p>	<p><b>ISCA Awards Luncheon</b> (Sponsored by Cavium Networks) 12:30 - 2:30 pm Exhibit Hall 3</p> <p><b>NCWIT National Ctr. for Women &amp; IT Academic Alliance Wine &amp; Cheese Reception and Information Session</b> (Everyone Welcome) 5:30 - 6:30 pm Hilton Winchester Room</p> <p><b>EC Business Meeting</b> 6:00 - 7:00 pm B</p> <p><b>ISCA SIGARCH/TCCA Business Mtg</b> 6:00 - 8:00 pm A3 &amp; A6</p> <p><b>PODC Banquet</b> 7:00 - 10:00 pm Crowne Plaza - Plaza C</p> <p><b>Complex Reception</b> 7:30 - 9:30 pm Marriott - Willow Glenn</p> <p><b>EC Reception</b> 7:30 - 9:30 A3 &amp; A6</p> <p><b>STOC Business Meeting</b> 9:00 - 11:00 pm A1 &amp; A8</p>	<p><b>METRICS Student Visit to SAP Research Lab, Palo Alto</b> 9:15 - 12:00 pm</p> <p><b>METRICS Student Industry Workshop</b> 2:10 - 5:10 pm G</p> <p><b>ACM Revising CS Curriculum</b> <b>IEEE</b> (Everyone Welcome!) 6:00 - 7:00 pm C2 &amp; C3</p> <p><b>Complex Rump Session</b> 8:00 - 10:00 pm Marriott - Salon 3</p> <p><b>HPDC Student Poster Session</b> <b>METRICS</b> 6:00 - 7:00 pm Concourse</p> <p><b>METRICS Reception</b> 7:00 - 9:00 pm Crowne Plaza - Miro Lounge</p>	<p><b>METRICS Poster Session</b> 5:30 - 7:00 pm Concourse</p> <p><b>HPDC Posters &amp; Reception</b> 6:00 - 8:00 pm Concourse</p> <p><b>ISSAC Joint Banquet</b> <b>SNC</b> 7:00 - 10:00 pm J2</p> <p><b>Complex Business Meeting</b> 8:00 - 10:00 pm A3 &amp; A6</p>	<p><b>ISSAC Business Meeting</b> 6:15 - 8:00 pm C2 &amp; C3</p> <p><b>METRICS Banquet</b> 6:30 - 8:30 pm Hilton</p> <p><b>HPDC Banquet</b> 7:30 - 10:00 pm Crowne Plaza</p>

Continental Breakfast 8:00 - 9:00 am, Sat 6/4 - Sat 6/11	Concourse	Lunch 12:30 - 1:30 pm, Sat 6/4 - Sat 6/11	Exhibit Hall 2
Morning Coffee Break 9:45 - 10:30 am, Sat 6/4 - Sat 6/11	Concourse	Afternoon Coffee Break 3:30 - 4:15 pm, Sat 6/4 - Sat 6/11	Concourse

**Note: Locations that are not prefaced with a hotel name are in the Convention Center**

## Saturday Morning, June 4

	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:50	12:00	12:10	12:20	12:30		
*A4MMC				<b>Keynote 1: Howes Lee (AMD)</b>					<b>COFFEE BREAK</b>			<b>Keynote 2: Christopher Lamb (NVIDIA)</b>					Energy aware scheduling for multi-core real time systems Kedar, Cidon, & Mendelson		Investigating the potential energy-savings using a fine-grained task based programming model on multi-cores Jordan, Podobas, Natvig, & Brorsson								
CRA-W	<b>Welcome &amp; Overview</b>		<b>Panel: Research as a Career</b> Ruzena Bacsjy (UC Berkeley), Evi Dube (Lawrence Livermore), Monica Lam (Stanford), Monica Martinez-Canales (Intel)							<b>COFFEE BREAK</b>			<b>Panel: The Job Search Process (pre-PhD)</b> Deborah Agarwal (Lawrence Berkeley Lab), Raquel Romano (Google), Jeannette Wing (CMU)														
													<b>Panel: Growing your Research Program through Funding, Collaboration, Networking (post-PhD)</b>														
*EAMA				<b>Welcome</b>	<b>Keynote 1: Manycore ASICs for Energy Efficient Scientific Computing from Teraflop Toaster Ovens to Exascale Computing</b> John Shaif (Lawrence-Berkeley National Lab)					<b>COFFEE BREAK</b>			Blue Summer: A Programmable Accelerator for Advanced Media Applications Cai	Auto-optimization of a feature selection algorithm Unat, Kim, Schulze, & Baden		<b>Keynote 2: Compute Challenges on Wall Street</b> Brad Spiers (Bank of America)											
*EON				OPENING REMARKS: <i>Goals for the Workshop: Edge of Networking Computing in Wired and Wireless Networks</i> -- Shairokh Dajjavad, Suredh Sathaye, & Jane Xu (IBM)			<b>OpenFlow/Software-Defined Networking: Enabling Network Innovations</b> Guru Parulkar (Stanford)			<b>COFFEE BREAK</b>			<b>Cloud and Fog Computing: Trade-Offs and Applications</b> Flavio Bonomi (Cisco)			<b>Adaptive Remote Execution Scheduler for Multithreaded Mobile Devices</b> London, Cidon, Katti, Kozrrakis, & Rosenblum											
*ISCA				<b>*Tutorial T1: GS: Graphite Simulator</b>					<b>COFFEE BREAK</b>			<b>*Tutorial T1: GS: Graphite Simulator (continued)</b>															
	<b>*Tutorial T2: SCA: Introduction to Security for Computer Architects</b>																										
	<b>*Tutorial T5: PARSEC: The New Version of PARSEC Benchmark Suite</b>					<b>COFFEE BREAK</b>			<b>*Tutorial T5: PARSEC (continued)</b>					<b>*Tutorial T5: PARSEC (concluded)</b>													
ISMM			<b>Welcome</b>	<b>Invited Talk: Memory Management beyond Free</b> Christos Kozyrakis					<b>COFFEE BREAK</b>			Iterative data-parallel mark & sweep on a GPU Veldema & Philippsen	Memory management in NUMA multicore systems: Trapped between cache contention and interconnect overhead Majo & Gross		Multicore garbage collection with local heaps Marlow & Peyton-Jones												
*PLDI	<b>*POLV Tutorial: Program Optimization through Loop Vectorization</b>																										
	<b>*Chord Tutorial: Chord: A Versatile Platform for Program Analysis</b>																										
SPAA	Graph expansion & communication costs of fast matrix multiplication Ballard, Demmel, Holtz, & Schwartz		Near linear-work parallel SDD solvers, low-diameter decomposition, and low-stretch subgraphs Blelloch, Gupta, Koutis, Miller, et al.		Linear-work greedy parallel approximate set cover and variants Blelloch, Peng, & Tangwongsan		Parallelism in dynamic well-spaced point sets Acar, Cotter, Hudson, & Türkoglu		<b>COFFEE BREAK</b>			A study of transactional memory vs locks in practice Pankratius & Adl-Tabatabai		Optimizing hybrid transactional memory: The importance of non-speculative operations Riegel, Marlier, Nowack, Felber, et al.		Flat-combining NUMA locks Dice, Marathe, & Shavit		Location-based memory barriers Ladan-Mozes, Lee, & Vyukov									
*X10	<b>Welcome</b>	X10 in a nutshell (mini-tutorial) Vijay Saraswat		A Performance model for X10 applications Grove, Tardieu, Cunningham, Herta, Peshansky, & Saraswat		Parallel programming: Design of an overview class von Praun			<b>COFFEE BREAK</b>			Object initialization in X10 Zibin, Cunningham, Peshansky, & Saraswat		Compiling X10 to Java Takeuchi, Makino, Kawachiya, Hori, Suzumura, Suganuma, & Onodera		Work-stealing by stealing states from live stack frames of a running application Kumar, Frampton, Grove, Tardieu, Blackburn											

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### ROOMS

A4MMC: F2  
CRA-W main session: C1 & C4  
CRA-W Split Session: C2  
EAMA: E

EON: Marriott - Blossom Hill  
ISCA Tutorial GS: G  
ISCA Tutorial SCA: B4  
ISCA Tutorial PARSEC: H

ISMM: A8  
PLDI Tutorial POLV: Marriott - Willow Glenn I  
PLDI Tutorial Chord: Marriott - Willow Glenn II

SPAA: B2 & B3  
X10: Marriott - Ballroom Salon I

## Saturday Afternoon, June 4

	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30	3:40	3:50	4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50
<b>*A4MMC</b>	Accelerating braided B+ tree searches on a GPU with CUDA <small>Fix, Wilkes, &amp; Skadron</small>		Exploiting task parallel execution on CUDA: A case study <small>Balevic</small>		Optimizing convolution operations in CUDA with adaptive tiling <small>Werkhoven, Maassen, &amp; Seinstra</small>			Set associative lock in software transactional memory <small>Atoofian</small>		Lazy atomic operations <small>Johnson, Johnson, &amp; Patel</small>		<b>COFFEE BREAK</b>			Impact of system and cache bandwidth on stencil computations across multiple processor generations <small>Shaheen, Strzodka, &amp; Pajak</small>		Parallel sorting on Intel single-chip cloud computer <small>Avdic, Melot, Keller, &amp; Kessler</small>		Dynamic heterogeneous scheduling decisions using historical runtime data <small>Gregg, Boyer, Hazelwood, &amp; Skadron</small>								
<b>*AMAS-BT</b>	Welcome	<b>Keynote : Commercial Binary Translation: A Retrospective?</b> <small>Alasdair Hawthorne (U. Manchester/IBM)</small>				DARCO: Infrastructure for research on HW/SW co-designed virtual machines <small>Pavlou, Brankovic, Kumar, Gregori, Stavrou, Gibert, &amp; Gonzalez</small>			Live range hole allocation in dynamic binary translation <small>Attrot, Nicacio, Borin, Rigo, &amp; Araujo</small>		<b>COFFEE BREAK</b>		<b>Invited Paper: Caracal: Dynamic Translation of Runtime Environments for GPGPU</b> <small>Rodrigo Dominguez &amp; David Kaeli</small>		Design and implementation of a fast microcode interpreter <small>Troeger, Mihocka, &amp; Keppel</small>		Leveraging binary translation for heterogeneous profiling <small>Upton &amp; Hazelwood</small>		<b>Closing Remarks</b>								
<b>*CBP</b>	Welcome		Perceptron branch prediction with separated taken/not-taken weight tables <small>Shi &amp; Lipasti</small>		OH-SNAP: Optimized hybrid scaled neural analog predictor <small>Jimenez</small>		A 64 kbytes ISL-TAGE branch predictor <small>Seznec</small>		Penalty-sensitive L-TAGE predictor <small>Hi, Koppelman, &amp; Peng</small>		Revisiting local history for improving fused two-level branch predictor <small>Ishii, Kuroyanagi, Sawada, et al.</small>		<b>COFFEE BREAK</b>		Exploring correlation for indirect branch prediction <small>Bhansali, Panirwala, &amp; Zhou</small>		A 64-kbytes ITTAGE indirect branch predictor <small>Seznec</small>		Bimode cascading: Adaptive rehashing for ITTAGE indirect branch predictor <small>Ishii, Sawada, Kuroyanaga, et al.</small>		SNIP: Scaled neural indirect predictor <small>Jimenez</small>		<b>Awards &amp; Closing Remarks</b>				
<b>CRA-W</b>	<b>Panel: Mentoring 101: How to Find a Mentor, How to Be a Mentor</b> <small>Nancy Amato (Texas A&amp;M), Robin Jeffries (Google), Fatma Mili (Oakland University)</small>				<b>COFFEE BREAK</b>		<b>Panel: The Tenure Process</b> <small>Ruzena Bacszy (UC Berkeley), Fatma Mili (Oakland University), Manuela Veloso (CMU)</small>				<b>Panel: Getting started in the Lab: Tips for Surviving the First Two Years</b> <small>A. J. Brush (Microsoft), Evi Dube (Lawrence Livermore), Raquel Romano (Google)</small>																
<b>*EAMA</b>	Challenge benchmarks that must be conquered to sustain the GPU revolution <small>Blem, Sinclair, Sankaralingam</small>			<b>Keynote 3: Emerging Applications from the UC Berkeley Par Lab</b> <small>David Patterson (UC-Berkeley)</small>				<b>COFFEE BREAK</b>				<b>Keynote 4: A Domain-Specific Approach to Heterogeneous Parallelism</b> <small>Hassan Chafi (OracleLabs)</small>		<b>Panel: Implications of Commonalities/Differences between Consumer Apps and Data Center/HPC Apps to Future Processor Architecture</b>													
<b>*EON</b>	<b>Building Network Edge Intelligence for Virtualized Data Centers</b> <small>Vijoy Pandey (Blade Network Technologies)</small>			<b>Wireless and IT Convergence at the Edge of the Network</b> <small>Shahrokh Daijavad, Sumedh Sathaye, &amp; Jane Xu</small>				<b>COFFEE BREAK</b>				<b>Panel Discussion: Edge of the Network Computing: A New Battleground for IT, Network, and Wireless/NEP Companies?</b>															
<b>*ISCA</b>	<b>*Tutorial 1: GS: Graphite Simulator (continued)</b>										<b>COFFEE BREAK</b>		<b>*Tutorial 1: GS: Graphite Simulator (continued)</b>														
<b>*Tutorial 1: SCA: Introduction to Security for Computer Architects (continued)</b>																											
<b>ISMM</b>	A comprehensive evaluation of object scanning techniques <small>Garner, Blackburn, &amp; Frampton</small>			On the theory and potential of collaborative cache management <small>Gu &amp; Ding</small>			Cache index-aware memory allocation <small>Dice, Afek, &amp; Morrison</small>			Waste not, want not: Resource-based garbage collection <small>Hertz, Kane, Keudel, Bai, Ding, Bard, &amp; Gu</small>			<b>COFFEE BREAK</b>		<b>Panel: Memory Management in the Year 2021</b>				<b>PC Chair Report &amp; ISMM Business Meeting</b>								
<b>*PLDI</b>	<b>*VELOX Tutorial: The VELOX transactional memory system stack from applications to</b>																										
<b>*McLab Tutorial: Introduction to McLab, a compiler and VM framework for</b>																											
<b>*ArBB Tutorial: Intel Array Building Blocks, a Dynamic compiler for data-parallel heterogeneous systems</b>																											
<b>SPAA</b>	Filtering: A method for solving graph problems in MapReduce <small>Lattanzi, Moseley, Suri, &amp; Vassilvitskii</small>			Parallelism and data movement characterization of contemporary application classes <small>Cabezas &amp; Stanley-Marbell</small>			Work-stealing for mixed-mode parallelism by deterministic team-building <small>Wimmer &amp; Träff</small>			The Pochoir stencil compiler <small>Tang, Choudhury, Kuszmaul, Luk, &amp; Leiserson</small>			<b>COFFEE BREAK</b>		<b>Brief Announcements I</b>				<b>Panel: Teaching Parallelism</b>								
<b>*X10</b>	Using the Cowichan problems to investigate the programmability of X20 programming system <small>Paudel &amp; Amaral</small>			X10 implementation of parallel option pricing with BSDE method <small>Liu, Peng, Wei, &amp; Dai</small>			Distributed deductive databases, declaratively: The L10 logic programming language <small>Simmons, Pfenning, &amp; Torinho</small>			<b>COFFEE BREAK</b>		X10 on the single-chip cloud computer <small>Chapman, Hussein, &amp; Hosking</small>		GPU Programming in a high level language compiling X10 to CUDA <small>Cunningham, Bofdawekar, &amp; Saraswat</small>		Phaser beams: Integrating stream parallelism with task parallelism <small>Shirako, Peixotto, Sbirlea, &amp; Sarkar</small>		<b>X10 Roadmap and User Community Discussion</b> <small>Michael Hind &amp; Vijay Saraswat</small>									

\* Open only to those who registered for this event

### ROOMS

<b>A4MMC:</b> F2	<b>EAMA:</b> E	<b>ISMM:</b> A8	<b>SPAA:</b> B2 & B3
<b>AMAS-BT:</b> F1	<b>EON:</b> Marriott - Blossom Hill	<b>PLDI Tutorial VELOX:</b> Marriott - Willow Glenn II	<b>X10:</b> Marriott - Ballroom Salon I
<b>CBP:</b> H	<b>ISCA Tutorial GS:</b> G	<b>PLDI Tutorial McLab:</b> Marriott - Willow Glenn III	
<b>CRA-W main session:</b> C1 & C4	<b>ISCA Tutorial SCA:</b> B4	<b>PLDI Tutorial ArBB:</b> Marriott - Willow Glenn I	
<b>CRA-W Split Session:</b> C2			

# Sunday Morning, June 5

	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:50	12:00	12:10	12:20		
<sup>†</sup> AdAuct					Online allocation of display ads with smooth delivery Bhalgat, Feldman, & Mirrokni	The multiple attribution problem in pay-per-view conversation advertising	Revenue maximization in probabilistic single-item auctions via sampling	COFFEE BREAK				Invited Talk: <i>Learning from Seller Experiments in Online Markets</i> -- Jonathan Levin						Empirical exchange rate fluctuations, consumer demand...	A hierarchical model for value estimation in sponsored search	Opt. reserve prices in weighted GSP auctions	Bidder subsidies in adword auctions & search eng. revenue						
<sup>†</sup> BMD	Tutorial, Part I: <i>Classical Bayesian Mechanisms</i> Jason Hartline & Shuchi Chawla							COFFEE BREAK				Tutorial, Part II: <i>Bayesian Approximation Mechanisms</i> Jason Hartline & Shuchi Chawla						Detail-free, posted-price mechanism for limited supply online auctions Babaioff, Dughmi, & Slivkins	On the impossibility of black-box truthfulness without peers Immorlica & Lucier								
CRA-W	Panel: <i>Time Management, Work/Life Balance Issues</i> Suzanne Hambrusch (Purdue/NSF), Daphne Koller (Stanford), Robin Jeffries (Google), Vidya Setlur (Nokia Research)							COFFEE BREAK				Panel (R-track): <i>Advising/Supervising Students</i> -- Sandhya Dwarkadis (Rochester) & Daphne Koller (Stanford)				Panel (L-track): <i>Learning How to Lead: Strategies to Grow Your Technical</i> -- Deborah Agarwal (LBNL) & A. J. Brush											
<sup>*</sup> Evaluate	Introductions							COFFEE BREAK				Benchmarking															
<sup>*</sup> Exadapt	Intro	Keynote: <i>Autotuning in the Exascale Era</i> Katherine Yelick (LBNL & UC Berkeley)				AARS: A low overhead adaptive online auto-tuning system Teodoro & Sussman	Contentiousness vs sensitivity: improving contention aware runtime systems on multicore architectures			COFFEE BREAK		Probabilistic auto-tuning for architectures with complex constraints Yvisaker & Hauck	Brief Overview: Collaborative opt. & machine learning	Efficiently exploring compiler optimization sequences with pairwise pruning -- Chabbi et al.	Pos. paper: Deploy time comp/opt	Loaf: A framework & infrastructure for creating online adaptive soins. Mars & Sofia	Pos. paper: 'Codelet' execution model										
<sup>*</sup> ISCA	Tutorial T3: <i>ESSA: Energy-Secure System Architectures</i>							COFFEE BREAK				Tutorial T3: <i>ESSA (Continued)</i>															
Tutorial T4: <i>gem5: A Multiple-ISA Full System Simulator with Detailed Memory Model</i>																											
ISMM	Invited Talk: <i>Memory Systems in the Many-Core Era: Challenge, Opportunities, and Solution Directions</i> -- Onur Mutlu (CMU)							COFFEE BREAK				C4: Continuously concurrent compacting collector Iyengar, Tene, & Wolf	Handles revisited: Optimising performance & memory costs in a real-time system Kaiber & Jones	Short-term memory for self-collecting mutators Aigner, Haas, Kirsch, Lippautz, Sokolova, et al.													
<sup>*</sup> MoBS	Intro	Keynote: <i>Modeling the Impact of Disruptive Technologies on System Architectures</i> Naveen Muralimanohar & Sheng Li (HP Labs)				COFFEE BREAK			Modeling, simulation and optimization of power & performance of data centers Bergamaschi, Piga, de Azevedo, Rigo, & Araujo	Joint exploration of hardware prefetching & bandwidth partitioning in chip multiprocessors -- Liu & Solihin		TMAPP: Typical mobile applications benchmark Issa, Le, Min, Steinbrecher, Figueira, et al.		Impact of Java application server evolution on computer system performance Chuang, Ozturk, Ban, Yan, Chow, & Sendag													
<sup>*</sup> MSPC	Opening Remarks	Invited Talk: <i>Memory Systems in the Many-Core Era: Challenge, Opportunities, and Solution Directions</i> -- Onur Mutlu (CMU)							COFFEE BREAK				There is nothing wrong with out-of-thin-air: Compiler optimization & memory models -- Verbrugge et al.	A programming model for deterministic task parallelism Pratikakis, Vandierendock, Lyberis et al.	Performance implications of fence-based memory models Boehm	Position Abstract: How to fit program footprint curves											
<sup>*</sup> NDCA	Intro	Keynote: <i>What to Do About the End of Moore's Law (Probably)?</i> -- Krishna Palem (Rice)				10x10: Taming heterogeneity for general-purpose architecture -- Chien	Trustworthy from the silicon up Sherwood	COFFEE BREAK		Object oriented execution model (OOM) Markovic, Nemirovsky, et al.	Stories, not words: Abstract datatype processors Kim	Pattern learning to enhance task & data management efficiency -- Gu et al.	Memory contexts: Supporting selectable cache & TLB contexts -- Brecht	On memory relaxations for extreme manycore system scalability -- Froning et al.													
<sup>*</sup> PLAS																											
<sup>†</sup> SCUGC	Opening Remarks	Crowdsourcing w. all-pay contests: A field experiment in Taskcn -- Liu, Yang, et al.	Barter: Mechanism design of a market-incented wisdom exchange for orgs and ...	A stock market approach to online distributed innovation ... -- Villarreal & Reis	Instructor rating markets Chakraborty, Das, Lavoie, Magdon-Ismael, & Naamad	COFFEE BREAK				Incentives for answering hypothetical questions Jurca & Faltings	Peer prediction with private beliefs Witkowski & Parkes	Expectations: Point estimates, probability distributions, confidence, & forecasts	Panel (11:30 - 12:45): <i>Crowdsourcing</i> Todd Carter (Tagasauris), Matt Cooper (oDesk), Mike Lydon														
SPAA	A tight runtime bound for synchronous gathering of autonomous robots with limited visibility	Stabilizing consensus with the power of two choices Doerr, Goldberg, Minder, et al.	Convergence of local communication chain strategies via linear transformations -- Kling et al.	The car sharing problem Briest & Raupach	COFFEE BREAK				Approximation algorithms for secondary spectrum auctions Hoefler, Kesselheim, & Voeking	Maximising lifetime for fault-tolerant target coverage in sensor networks Erelbach, Grant, & Kammer	Convergence to equilibrium of logit dynamics for strategic games Auletta, Ferrioli, Pasquale, Penna, et al.	On a bounded budget network creation game Fazli, Ehsani, Mehrabian, et al.															
Transact	From lightweight hardware transactional memory to lightweight lock elision Pohlack & Diesterhorst		TSO-atomicity: Efficient TSO enforcement for optimization Wang, Wu, & Chung	A comprehensive study of conflict resolution policies in hardware transactional memory - Akpinar et al.			COFFEE BREAK				The universal transactional memory construction Warmhoff & Fetzer	Toxic transactions Liu & Spear	Region-based dynamic separation for STM Haskell Effinger-Dean & Grossman	Transactional correctness for secure nested transactions Duggan & Wu													
<sup>*</sup> WDDD	Performance in GPU architectures: Potentials and distances Annaram, Jerger, & Loh			Evaluating linear regression for temperature modeling at the core level Upton & Hazelwood			COFFEE BREAK				Reexamining instruction reuse in preexecution approaches Wolf & Barnes	Zcache skew-ered Sampson & Wensich		Invited Response	Refining the utility metric for utility-based cache partitioning Lin & Balasubramanian	Invited Response	Conclusions & Feedback										
<sup>*</sup> WEED	Introduction		EASE: Energy-aware self-optimizing DRAM scheduler Mukundan & Martinez	Energy-aware memory management through database buffer control Bae & Jamel			COFFEE BREAK				Reducing power & area by interconnecting memory controllers to memory ranks with RF coplanar waveguides on the same pkg. Faraji & Baniasadi	Time-based snoop filtering in chip multiprocessors Faraji & Baniasadi		CCNoC: On-chip interconnects for cache-coherent manycore server chips Pour, Falsafi, & De Micheli													

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## ROOMS

AdAuct: A4  
BMD: A3  
CRA-W main session: C1 & C4  
CRA-W Split Session: C2

Evaluate: Marriott - Willow Glenn II  
Exadapt: Marriott - Ballroom I  
ISCA Tutorial ESSA: H  
ISCA Tutorial gem5: A2  
ISMM: A8

MoBS: E  
MSPC (before 10:00): A8  
MSPC (after 10:00): Marriott - Ballroom II  
NDCA: A1  
PLAS: Marriott - Willow Glenn I

SCUGC: C3  
SPAA: B2 & B3  
Transact: F1 & F2  
WDDD: B4  
WEED: G

# Sunday Afternoon, June 5

	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30	3:40	3:50	4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50
<sup>†</sup> AdAuct	Invited Talk: Muthu Muthukrishnan					Repeated budgeted 2nd price ad auction Amon & Mansour		On revenue in the generalized 2nd price auction Lucier, Leme, & Tardos		Efficient ranking in sponsored search Lahaie & McAfee		Quality score that makes you invest Katona & Zhu		COFFEE BREAK				Panel: <i>Monetization Challenges Faced by Internet Companies</i> Ashish Goel (Stanford/Twitter), Vijay Kumar (Groupon), Kang-Xing Jin (Facebook)									
<sup>†</sup> BMD	Approximating optimal combinatorial auctions for complements using restricted welfare maximization			Extreme-value theorems for optimal multidimensional pricing Cai & Daskalakis		Bayesian combinatorial auctions: Expanding single buyer mechanisms to many buyers -- Alaei			On optimal multi-dimensional mechanism design Daskalakis & Weinberg			COFFEE BREAK		Strongly budget-balanced & nearly efficient allocation of a single good Cavallo		Optimality vs practicality in market design: A comparison of 2 double auctions -- Satterthwaite et al.		Crowdsourced Bayesian auctions Azar, Chen, & Micali									
*CARD	Panel: <i>Future of Computing: Hardware vs Software</i> Burton Smith (Microsoft), Gurindar Sohi (U.Wisconsin), Wen-mei Hwu (UIUC)					Panel: <i>Specialized vs General-Purpose Hardware</i> Krstec Asanović (UC Berkeley), Mark Horowitz (Stanford), Bill Dally (NVIDIA)					COFFEE BREAK		Panel: <i>End of Scaling and its Effects</i> Pradip Bose (IBM), Chuck Moore (AMD), Phil Emma (IBM)				Closing Remarks										
CRA-W	Session 1: <i>Teaching May be an Art, but Learning is a Science</i> Beth Simon (UCSD)					Session 2: <i>Course Planning, Execution, and Assessment</i> Lori Pollock (U. Delaware)					COFFEE BREAK		Panel: <i>Effective &amp; Efficient Course Management and Delivery</i> Mary Jane Irwin (Chair), Beth Simon, Lori Pollock, Tracy Camp (Panelists)														
*Evaluate	Metrics and Validation										COFFEE BREAK	Data Analysis and Wrap Up															
*FASPP	Keynote: <i>Safe and Efficient Parallelism: A Hardware-Software Symbiosis</i> -- Marc Snir (University of Illinois at Urbana-Champaign)					A program execution model for massive parallelism Dennis, Meng, Slocum, & Lucas		Coherence-less memory model for shared memory, speculative multi-core processors -- Vajda et al.		Synchronization-free & deterministic coarse-grain parallelism: Architectural support & programming model			COFFEE BREAK		Architecture-aware task-scheduling: A thermal approach Podobas & Brorsson		Improving the scalability & capabilities of the Nexus hardware task mgmt system -- Dallou et al.		Embedded domain-specific languages pave the way for new parallel architectures - Svensson et al.								
*ISCA	Tutorial T3: <i>ESSA: Energy-Secure System Architectures</i> (Continued)										COFFEE BREAK		Tutorial T3: <i>ESSA</i> (Continued)														
	Tutorial T4: <i>gem5: A Multiple-ISA Full System Simulator with Detailed Memory Model</i> (This session reserved for detailed development questions)																										
ISMM	Garbage collection auto-tuning for Java MapReduce on multicores Singer, Lujan, Kovoov, & Brown		Compartmental memory management in a modern web browser Wagner, Gal, Wimmer, Eich, & Franz		Integrated symbol table, engine and heap memory mgmt in multi-engine Prolog Tarau			COFFEE BREAK		Wild and Crazy Ideas Session																	
*MSPC	Extended sequential reasoning for data-race-free programs Effinger-Dean, Boehm, et al.		Data-race-exceptions have benefits beyond the memory model Wood, Ceze, & Grossman		The impact of diverse memory architectures on multicore consumer software -- Russell, Riley, et al.		Let there be light: The future of memory systems is photonics & 3D stacking -- Bergmen, Hendry, et al.		Minor memory refs matter in collaborative caching -- Gu		COFFEE BREAK		Garbage collection for multicore NUMA machines Auhagen, Bergstrom, Fluet, & Reppy		Deferred gratification: Engineering for high performance garbage collection from the get go		Approximating inclusion-based points-to analysis Nasre										
*PLAS																											
*PLDI	*CCPTL Tutorial: <i>Compiler Challenges for Task-Parallel Languages</i> -- Vivek Sarkar (Rice University)																										
<sup>†</sup> SCUGC <sup>†</sup> EC	Task routing for prediction tasks Zhang, Horvitz, Chen, & Parkes		Optimal crowdsourcing contests Chawla, Hartline, & Sivan		Combinatorial agency of threshold functions Jain & Parkes		Invited Talk: <i>Signed Networks and User Evaluation</i>					COFFEE BREAK		*EC Tutorial T2: <i>Conducting Behavioral Research Using Amazon's Mechanical Turk</i> Winter Mason (Yahoo! Research) & Siddharth Suri (Yahoo! Research)													
SPAA	Online packet-routing in grids with bounded buffers Even & Medina		Sparse spanners vs compact routing Gavoille & Sommer		Re-Chord: A self-stabilizing Chord overlay network Kriesburg, Scheidele, et al.		Recommender systems with non-binary grades Azar, Nisgav, & Patt-Shamir			COFFEE BREAK		Brief Announcements II															
Transact	Collecting transactional garbage Meawad, Macnak, & Vitek			Towards applying machine-learning to adaptive transactional memory Wang, Kulkarni, Cavazos, & Spear		Revisiting condition variables & transactions Luchangco & Marathe		Questions		Supporting STM in distributed systems: Mechanisms and a Java framework Saad & Ravindran		HParSTM: A hierarchy-based STM protocol for supporting nested parallelism		A comprehensive study of conflict resolution policies in HW transactional memory		Discussion											
*WEED	Open-Mike Discussion: <i>Green Computing Challenges</i>					Power provisioning for diverse datacenter workloads Stewart		Exploring the potential of CMP core count management on data center energy savings -- Bilgic, Martonosi, & Wu			COFFEE BREAK		Mitigating the effects of process variation in ultra-low voltage chip multiprocessors using dual supply voltages & half-speed...		The seventh cell of a six-cell battery Raychev, Li, & Shi		An energy efficient datapath for asymmetric cryptography Targhetta & Gratz		Thank You								

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## ROOMS

AdAuct: A4  
BMD: A3  
Card: A1  
CRA-W main session: C1 & C4  
CRA-W Split Session: C2

Evaluate: Marriott - Willow Glenn II  
FASPP: B4  
ISCA Tutorial ESSA: H  
ISCA Tutorial gem5: A2

ISMM: A8  
MSPC: Marriott - Ballroom II  
PLAS: Marriott - Willow Glenn I  
PLDI Tutorial CCPTL: Marriott - Ballroom I

SCUGC: C3  
SPAA: B2 & B3  
Transact: F1 & F2  
WEED: G

# Monday Morning, June 6

	8:15	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30 - 12:30
<sup>†</sup> EC	<b>Tutorial T3: Matching and Market Design</b> Itai Ashlagh (MIT), Alvin Roth (Harvard), Fuhito Kojima (Stanford)																				<b>PLENARY TALK</b> Exhibit Hall 1  <b>IBM's Watson / DeepQA</b>  <b>David A. Ferrucci, IBM</b>
ISCA	<b>Welcome Messages</b>			Automatic abstraction & fault-tolerance in cortical microarchitectures <small>Hashimi, Berry, Temam, &amp; Lipasti</small>	FabScalar: Composing synthesizable RTL designs of arb. cores within a ... superscalar template <small>Choudhary, Wadhavkar, Shah, et al.</small>	CRIB: Consolidated rename, issue and bypass <small>Gunadi &amp; Lipasti</small>	<b>COFFEE BREAK</b>				FlexBulk: Intelligently forming atomic blocks in blocked-execution multiprocessors to minimize... <small>Agarwal &amp; Torrellas</small>	Virtualizing performance asymmetric multi-core systems <small>Kwon, Kim, Maeng, &amp; Huh</small>									
IWQoS	<b>Welcome Messages</b>			<b>Keynote: Internet Video: The 2011 Perspective</b> Hui Zhang (CMU Professor and Conviva Chief Scientist)			<b>COFFEE BREAK</b>				Measuring the effectiveness of infrastructure-level detection of large-scale botnets <small>Zeng, Yan, Eidenbenz, &amp; Shin</small>	Identity attack and anonymity protection for P2P VoD system <small>Lv, Lee, &amp; Lui</small>	Rake: Semantics assisted network-based tracing framework <small>Zhao, Cao, Chen, Zhang, &amp; Goyal</small>								
<sup>†</sup> NetEcon	<b>Welcome</b>			<b>Keynote: Cognitive Radio Games: Math. Formulation &amp; Solution Analysis</b> Jong-Shi Pang (University of Illinois)			Making currency inexpensive with iOwe <small>Levin, Schulman, Lacurts, &amp; Bhattacharjee</small>	On the Sybilproofness of accounting mechanisms <small>Seuken</small>	<b>COFFEE BREAK</b>				The sunk cost fallacy in reverse auctions <small>Wu &amp; Ung</small>	Economics of BitTorrent communities <small>Kash, Lai, &amp; Zhang</small>	Vanishing signals: Trading agent kills market information <small>Boehme &amp; Grossklags</small>						
PLDI	<b>WELCOME</b>			Commutative Set: A Language extension for implicit parallel programming <small>Prabhu, Ghosh, Zhang, et al.</small>	The Tao of parallelism in algorithms <small>Pingali, Nguyen, Kulkarni, Burtcher, Hassan, et al.</small>	Parallelism orchestration of parallelism executive <small>Raman, Kim, Oh, Lee, et al.</small>	<b>COFFEE BREAK</b>				Generalized just-in-time trace compilation using a parallel task farm... <small>Böhm, Edler von Koch, et al.</small>	Brainy: Effective selection of data structures <small>Jung, Rus, Railing, Clark, &amp; Pande</small>	An SSA-based alg. For optimal speculative code motion under an ... <small>Zhou, Chen, &amp; Chow</small>								
				Data representation synthesis <small>Hawkins, Aiken, Fisher, Rinard, &amp; Sagiv</small>	Synthesizing geometry constructions <small>Gulwani, Korthikanti, &amp; Tiwari</small>	Synthesis of loop-free programs <small>Gulwani, Jha, Tiwari, &amp; Venkatesan</small>					Caisson: A hardware description language for secure information flow <small>Oi, Tiwari, Oberg, et al.</small>	Steno: Automatic optimization of declarative queries <small>Murray, Isard, &amp; Yu</small>	Languages as libraries <small>Tobin-Hochstadt, St-Amour, Culpepper, Flatt, &amp; Felleisen</small>								
PODC	<b>Welcome</b>			Coordinated consensus in dynamic networks <small>Kuhn, Moses, &amp; Oshman</small>	Error-free multi-valued consensus with Byzantine failures <small>Liang &amp; Vaidya</small>	Byzantine agreement with homonyms <small>Delporte-Gallet, Fauconnier, Guerraoui, Kermarrec, et al.</small>	<b>COFFEE BREAK</b>				Distributed coloring in few rounds <small>Kothapalli &amp; Pemmaraju</small>	MIS on Trees <small>Lenzen &amp; Wattenhofer</small>	Toward more localized local algs: Removing global knowledge assumptions. <small>Korman, Sereni, &amp; Viennot</small>								
SPAA	<b>Welcome</b>			On a local protocol for concurrent file transfers <small>Hajiaghayi, Khandekar, Kortsarz, &amp; Liaghat</small>	On multi-processor speed scaling and migration <small>Albers, Antoniadis, &amp; Greiner</small>	On scheduling in MapReduce and flow shops <small>Moseley, Dasgupta, Kumar, &amp; Sarlos</small>	Finding heavy distinct hitters in data streams <small>Locher</small>	<b>COFFEE BREAK</b>				<b>Brief Announcements</b>									
STOC	<b>Welcome</b>			The power of simple tabulation hashing <small>Patrascu &amp; Thorup</small>	Tight bounds for parallel randomized load balancing <small>Lenzen &amp; Wattenhofer</small>	Social networks spread rumors in sublogarithmic time <small>Doerr, Fouz, and Freidrich</small>	<b>COFFEE BREAK</b>				Cover times, blanket times, and majorizing measures <small>Ding, Lee, &amp; Peres</small>	A general framework for graph sparsification <small>Fung, Hariharan, Harvey, &amp; Panigrahi</small>	Breaking $O(n^{1/2})$ -approximation algorithms for the edge-disjoint paths problem w. congestion 2 <small>Kawarabayashi &amp; Kobayashi</small>								
				Quantum one-way communication can be exponentially stronger than classical communication <small>Klartag &amp; Regev</small>	Strong direct product theorems for quantum communication and query complexity <small>Sherstov</small>	An optimal lower bound on the communication complexity of gap-Hamming-distance <small>Chakrabarti &amp; Regev</small>					The equivalence of the random oracle model and the ideal cipher model, revisited <small>Holenstein, Künzler, &amp; Tessaro</small>	Separating succinct non-interactive arguments from all falsifiable assumptions <small>Gentry &amp; Wichs</small>	Limits of provable security from standard assumptions <small>Pass</small>								
<sup>†</sup> WIT	<b>Welcome</b>			<b>Invited Talk: Price Discrimination through Communication</b> Rakesh Vohra			Robust welfare guarantees in bilateral trading mechanisms <small>Yamashita</small>	<b>COFFEE BREAK</b>				Truthful implementation & aggregation in restricted domains <small>Carbajal, McLennan, &amp; Tourky</small>	Detecting profitable deviations <small>Rahman</small>								

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## ROOMS

EC Tutorial: K  
 ISCA: Exhibit Hall 3  
 IWQoS: F1 & F2  
 NetEcon: N

PLD Session A: A3 & A6  
 PLD Session B: A4 & A5  
 PODC: C2 & C3  
 SPAA: B2 & B3

STOC Session A: A1 & A8  
 STOC Session B: A2 & A7  
 WIT: L

# Monday Afternoon, June 6

	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30	3:40	3:50	4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50	
<sup>†</sup> EC	<b>Tutorial T5: Measuring Online Ad Effectiveness</b> D. Kumar (Google), R. Lewis & D. Reiley (Yahoo! Research) & Taylan Yildiz (Google)														COFFEE BREAK			<b>Tutorial T5 (Continued)</b>										
ISCA	Vantage: Scalable and Efficient fine-grain cache partitioning Sanchez & Kozyrakos			Architecting on-chip interconnects for stacked 3D STT-RAM caches in CMPs Mishra, Dong, Sun, Xie, et al.			Bypass and insertion algorithms for exclusive last-level caches Gaur, Chaudhuri, & Subramoney			Increasing the effectiveness of directory caches by deactivating coherence for private data Cuesta, Ros, Gomez, Robles, & Duato			COFFEE BREAK			Rebound scalable checkpointing for coherent shared memory Agarwal, Garg, & Torrellas			Demand-driven software race detection using hardware performance counters Greathouse, Ma, Frank, Peri, & Austin			(Buses Leave for ISCA Banquet/Excursion at 5:15)						
	TLSync: Support for multiple fast barriers using on-chip transmission lines Oh, Prvulovic, & Zajic			OUTRIDER: Efficient memory latency tolerance with decoupled strands Crago & Patel			Exploring the tradeoffs between programmability and efficiency in data-parallel accelerators Lee, Avizienis, Bishara, Xia, et al.			Prefetch-aware shared resource management for multi-core systems Ebrahimi, Lee, Mutlu, & Patt						i-NVMM: A secure non-volatile main memory system with incremental encryption Chhabra & Solihin			Creating a usable microkernel processor and IO system w. strict and provable information flow security Tiwari, Oberg, Li, Valamehr, et al.									
IWQoS	Multi-tiered, business-aware bandwidth estimation and scheduling for VBR video flow Kalle, Devi, & Kalyanaraman		Peer-assisted online games w with social reciprocity Wang, Wu, Sun, & Yang		Accelerating P2P file sharing with social networks: Challenges and potentials Wang, Wang, & Liu		Distributed admissions control for real-time media streams Liu		COFFEE BREAK & POSTER SESSION							Adaptive data-driven service integrity attestation for multi-tenant cloud systems Du, Shah, & Gu		PERFUME: Power & performance guarantee with fuzzy MIMO control in virtualized servers. Lama & Zhou		Response time-based self-tuning fuzzy control of virtualized resources Rao, Wei, Gong, & Xu		OLIC: Online information compression for scalable hosting infrastructure monitoring Tan & Gu						
<sup>†</sup> NetEcon	Multi-level revenue sharing for viral marketing Abbassi & Misra		Prisoner's dilemma on graphs with large girth Manshadi & Saberi		On global games of regime change in networks Dahleh, Tahbaz-Salehi, Tsitsiklis, & Zoumpoulis		Access point selection under emerging wireless technologies Cassell, Alperovich, et al.		A facility location problem under competition Gur & Stier-Moses		COFFEE BREAK			The price of free spectrum to heterogeneous users Nguyen, Zhou, Berry, Honig, & Vohra		Multi-period optimal energy procurement & demand responses in smart grid... Jiang & Low		Flat versus metered rates, bundling, and "bandwidth hogs" Nabipay, Odlyzko, & Zhang		Enabling spectrum sharing in secondary auction markets Kash, Murty, and Parkes		C L O S E						
PLDI	Automatic CPU-GPU communication management and optimization Jablin, Prabhu, Jablin, et al.		Automatic compilation of MATLAB programs for synergistic execution on heterogeneous processors Sampson, Dietl, Fortuna, et al.		EnerJ: Approximate data types for safe & general low-power computation Sampson, Dietl, Fortuna, et al.		<b>Poster Session: Student Research Competition</b> (Concourse)							COFFEE BREAK			<b>Fun Ideas and Thoughts</b> (Exhibit Hall 1)							<b>Program Chair Report</b> (Exhibit Hall 1)				
PODC	The complexity of robust atomic storage Dobre, Guerraoui, et al.			Resilience of mutual exclusion algorithms to transient memory faults Moscibroda & Oshman										Structuring unreliable radio networks Censor-Hillel, Gilbert, Kuhn, Lynch, & Newport		The impact of memory models on software reliability in multiprocessors Jaffe, Moscibroda, et al.		COFFEE BREAK			On the power of hardware transaction memory to simplify memory management		A complexity separation between cache-coherent & distributed SMMs Golab		From bounded to unbounded concurrency objects and back Afek, Morrison, & Wertheim		Distributed deterministic edge coloring using bounded neighborhood independence Barenboim & Elkin	
SPAA	Tight bounds for anonymous adopt-commit objects Aspnes & Ellen			A highly-efficient wait-free universal construction Fatourou & Kallimanis		A lock-free algorithm for concurrent bags Sundell, Gidenstam, Papatriantafyllou, & Tsigas		Understanding Bloom filter intersection for lazy address-set disambiguation Jeffrey & Steffen		COFFEE BREAK			Scheduling irregular parallel computations on hierarchical caches Blelloch, Fineman, Gibbons, & Simhadri		Sharing-aware algorithms for virtual machine colocation Sindelar, Sitaraman, & Shenoy		Data-oblivious external-memory algorithms for the compaction, selection, and sorting of outsourced data Goodrich											
STOC	On optimal single-item auctions Papadimitriou & Pierrakos			Optimal auctions with correlated bidders are easy Dobzinski, Fu, & Kleinberg		An impossibility result for truthful combinatorial auctions with submodular valuations Dobzinski		From convex optimization to randomized mechanisms: Optimal comb. auctions for submod. bidders Dughmi, Roughgarden, & Yan		COFFEE BREAK			Rank-1 bimatrices games: A homeomorphism and a polynomial time algorithm Adsul, Gang, Mehta, & Sohoni		Exact algorithms for solving stochastic games Hansen, Koucky, Lauritzen, Bro-Miltersen, & Tsigaridas		Dueling algorithms Immorlica, Kalai, Lucier, Moitra, Postlewaite, & Tennenholtz		Pareto optimal solutions for smoothed analysis Moitra & O'Donnell									
	Towards coding for maximum errors in interactive communication Braverman & Rao			High-rate codes with sublinear-time decoding Koppary, Saraf, & Yekhanin		From affine to two-source extractors via approximate duality Ben-Sasson & Zewi		Correlation testing for affine invariant properties in $\mathbb{F}_p^n$ in the high error regime Hatami & Lovett					Moser and Tardos meet Lovász Kolipaka & Szegedy		A full derandomization of Schoening's k-SAT algorithm Moser & Scheder		Pseudorandom generators for combinatorial shapes Gopalan, Meka, Reingold, & Zuckerman		Pseudorandom generators for group products Koucky, Nimbhorkar, & Pudlak									
<sup>†</sup> WIT	Finitely repeated Nash implementation Mezetti & Renou			Computationally tractable Bayes-Nash implementation Haghpanah & Hartline		The second knowledge mechanism Chen & Micali		COFFEE BREAK			<b>Tutorial: Outside Options in Mechanism Design</b> Malesh Pai & Rakesh Vohra)																	

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## ROOMS

EC Tutorials: K  
 ISCA Session A: Exhibit Hall 3  
 ISCA Session B: J  
 IWQoS: F1 & F2

NetEcon: N  
 PLDI Session A: A3 & A6  
 PLDI Session B: A4 & A5  
 PODC: C2 & C3

SPAA: B2 & B3  
 STOC Session A: A1 & A8  
 STOC Session B: A2 & A7  
 WIT: L

## Tuesday Morning, June 7

	8:15	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30 - 12:30	
EC			Network formation in the Presence of contagious risk Blume, Easley, Kleinberg, Kleinberg, & Tardos		Optimal auctions with positive network externalities Haghpanah, Immorlica, Munagal & Mirrokni		Does more connectivity help groups solve social problems? Enemark, McCubbins, Paturi, & Weller		COFFEE BREAK			Yield optimization of display advertising with ad exchange Balseiro, Feldman, Mirrokni, & Muthukrishnan		Near optimal online algorithms fast approximations algorithm for resource allocations prob Devanur, Jain, Sivan, & Wilkins		Hiding a secretary from a poset Kumar, Lattanzi, Vassilvitskii, & Vattani					<b>PLENARY TALK</b> <b>Exhibit Hall 1</b>  <i>Algorithms:</i> <b>Recent Highlights &amp; Challenges</b>  <b>Ravi Kannan</b> <b>Microsoft Research</b>	
ISCA				Sampling + DMR: Practical and low-overhead permanent fault detection Nomura, Sinclair, Ho, et al.		Releasing efficient beta cores early to market Sudhakarishnan, Dicochea, & Renau		CPPC: Correctable parity protected cache Manoochehri, Annavaram, & Dubois		COFFEE BREAK			Energy-efficient mechanisms for managing thread context in throughput processors Gebhart, Johnson, Tarjan, et al.		SRAM-DRAM hybrid memory w. applications to efficient register in fine grained multi-threading archs. Yu, Huang, Xu, Wang, Kan, & Suh							
															An abacus turn model for time/space-efficient reconfigurable routing Fu, Han, Ma, Li, & Li		A case for globally shared-medium on-chip interconnect Carpenter, Hu, Xu, Huang, & Wu					
IWQoS				Keynote: <i>The Future of Networking, and the Past of Protocols</i> Scott Shenker (Berkeley, ICSI, Nicira Networks Chief Scientist)				COFFEE BREAK			Measuring the effectiveness of infrastructure-level detection of large-scale botnets Zeng, Yan, Eldenbenz, & Shin		Identity attach & anonymity protection for P2P-VoD systems Lv, Lee, & Lui		Rake: Semantics assisted network-based tracing framework Zhao, Cao, Chen, Zhang, & Goyal							
*Metrics	*Tutorial 1: <i>Building Accurate Workload Models using Markovian Arrival Processes</i> Giuliano Casale (Imperial College, London)						COFFEE BREAK			*Tutorial 2: <i>Non-Asymptotic Analysis of Mobile Ad-Hoc Networks</i> Florin Ciucu (TU Berlin, Deutsche Telekom Lab)												
PLDI				Probabilistic, modular and scalable inference of typestate specifications Beckman & Nori		Predicate abstraction and CEGAR for higher-order model checking Kobayashi, Sato & Unno		Mostly-automated verification of low-level programs in comput. separation logic Chlipala		COFFEE BREAK			Finding & understanding bugs in C compilers Yang, Chen, Eide, & Regehr		Evaluating value-graph translation validation for LLVM Tristan, Govereau, et al.		Safe optimizations for shared-memory concurrent programs Ševčík					
							Toward generating reducible replay logs Lee, Zheng, Sumner, & Zhang		Higher-order test generation Godofroid		LeakChaser: Helping programmers narrow down causes of memory leaks Xu, Bond, Qin, & Rountev					Spreadsheet table transformations from examples Harris & Gulwani		Systematic editing: Generating program transformations from an example Meng, Kim, & McKinley				
PODC				Compact policy routing Rétváári, Gulyás, Heszberger, & Csernai		Locally checkable proofs Göös & Suomela		Fault-tolerant spanners: Better and simpler Dinitz & Karuthgamer		COFFEE BREAK			Adaptively secure broadcast, revisited Garay, Katz, Kumaresan, & Zhou		Scalable rational secret sharing Dani, Movahedi, Rodriguez, & Saia		Analyzing consistency properties for fun and profit Golab, Li, & Shah					
SNC				OPENING REMARKS		Invited Talk: <i>Mahler Measures, Short Walks and Log-sine Integrals: A Case Study in Hybrid Computation</i> Jonathan Borwein				COFFEE BREAK			A regularization method for computing approximate invariants of plane curve singularities Hodorog & Schicho		Arrangement computation for planar algebraic curves Emeliyanenko, Kobel, Berberich, & Sagraloff							
STOC			Electrical flows, Laplacian systems, & faster approximation of maximum flow in undirected graphs Christiano, Kelner, Madry, et al.		Subexponential lower bounds for randomized pivoting rules for the simplex algorithm Friedmann, Hansen, & Zwick		Analyzing network coding gossip made easy Haeupler		COFFEE BREAK			An algorithm for the graph crossing number problem Chuzhoy		Improved algorithms for min cut and max flow in undirected planar graphs Italiano, Nussbaum, Sankowski, et al.		Directed spanners via flow-based linear programs Dinitz & Krauthgamer						
												The computational complexity of linear optics Aaronson & Arkhipov		A quasipolynomial-time algorithm for the quantum separability problem Brandao, Christandl, & Yard		Parallel repetition of entangled games Kempe & Vidick						

\* Open only to those who registered for this event

### ROOMS

EC: B  
 ISCA Session A: Exhibit Hall 3  
 ISCA Session B: J  
 IWQoS: F1 & F2

Metrics Tutorials: N  
 PLDI Session A: A3 & A6  
 PLDI Session B: A4 & A5  
 PODC: C2 & C3

SNC: C1 & C4  
 STOC Session A: A1 & A8  
 STOC Session B: A2 & A7

## Tuesday Afternoon, June 7

	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30	3:40	3:50	4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50	6:00		
<b>EC</b>		The effects of exposure time on memory of display advertisements <small>Goldstein, McAfee, &amp; Suri</small>		Reserve prices in Internet advertising auctions: A field experiment <small>Ostrovsky &amp; Schwarz</small>		Stochastic variability in sponsored search auctions: Observations and models <small>Pin &amp; Kay</small>		GSP auctions with correlated types - and - On the efficiency of equilibria in GSP auctions		Multi-keyword sponsored search <small>Dhangwatnotai</small>	<b>COFFEE BREAK</b>				A revealed preference approach to computational complexity in economics <small>Echinique, Golovin, &amp; Wierman</small>	Repeated matching pennies with limited randomness <small>Budinich &amp; Fortnow</small>	Polynomial-time computation of exact correlated equilibria in compact games <small>Jiang &amp; Leyton-Brown</small>	Distributed algorithms via gradient descent for Fisher markets <small>Birnbaum, Devanur, &amp; Xiao</small>	Economies with non-convex production and complexity equilibria <small>Papadimitriou &amp; Wilkins</small>											
<b>*Green</b>	<b>KEYNOTE</b>						Geographical load balancing with renewables <small>Liu, Lin, Wierman, Low, &amp; Andrew</small>	Tradeoffs in green cellular networks <small>Altman, Hanawal, El-Azouzi, &amp; Shamai</small>	Powering down for energy efficient peer-to-peer file distribution <small>Nguyen, Andrew, &amp; Sucevic</small>	<b>COFFEE BREAK</b>			ReRack: Power simulation for data centers with renewable energy generation <small>Brown &amp; Renau</small>	Copy rate synchronization w. performance guarantees for work consolidation in storage clusters -- Yan et al.	An analysis of power reduction in datacenters using heterogeneous chip multi-processors -- Gupta et al.	Using centric green performance indicators <small>Chen, Henis, Kat, Sotnikov, Cappelletto, Ferreira, et al.</small>	<b>WRAP UP</b>													
<b>ISCA</b>	<b>CONTINUATION OF AWARDS LUNCH</b>						The impact of memory subsystem resource sharing on datacenter applications <small>Tang, Mars, Vachharajani, et al.</small>	Adaptive granularity memory systems: A tradeoff between storage efficiency and throughput <small>Yoon, Jeong, &amp; Erez</small>	SpecTLB: A mechanism for speculative address translation <small>Barr, Cox, &amp; Rixner</small>	<b>COFFEE BREAK</b>			<b>Panel Broadening Computer Architecture Research: Embracing New Areas to Keep the Field Vibrant</b>																	
						Power management of on-line data-intensive services <small>Meisner, Sadler, Barroso, Weber, &amp; Wernisch</small>	From microns to megawatts: Modeling the data center scale effects of targeted superlattice thermal mgmt <small>Biswas, Tiwari, Sherwood, et al.</small>	Benefits and limitations of tapping into stored energy for datacenters <small>Govindan, Sivasubramanian, &amp; Urgaonkar</small>																						
<b>IWQoS</b>	Messaging & enhancing the social connectivity of UGC systems: A case study of You <small>Li, Gu, &amp; Xie</small>	Mitigating interference in a network measurement service <small>Gangam &amp; Fahmy</small>	Restoration measurements on an IP/MPLS backbone: The effect of fast reroute on link failure <small>Ramachandran, Ciavattone, et al.</small>	<b>BREAK</b>		Multi-chan. reliability & spectrum use in real homes: Emp. stud for home-area sensor network <small>Sha, Hackmann, &amp; Lu</small>	EleSense: Exploiting elevator for wireless sensor data collection in high-rise structure monitoring <small>Wang, Wang, &amp; Liu</small>	Evaluating coverage quality through best/worst covered paths in wireless sensor networks <small>Tang</small>	<b>COFFEE BREAK</b>			Leveraging statistical multiple gain in single and multi-hop networks <small>Rizk &amp; Fidler</small>	Designing efficient codes for synchronization error channels <small>Wang &amp; Lin</small>	On the performance of TCP over throughput-optimal CSMA <small>Wei, Wang, Chen, &amp; Liew</small>	<b>WRAP UP</b>															
<b>*Metrics</b>	<b>*Tutorial 3: Online Ad Serving: Theory and Practice</b> Aranyak Mehta & Vahab Mirrokni (Google)																													
<b>PLDI</b>	A security policy oracle: Determining security holes using multiple API implementations -- Srivastava et al.	Language-independent sandboxing of just-in-time compilation & self-modifying code -- Ansel et al.	Cruiser: Concurrent heap buffer overflow monitoring using lock-free data structures. <small>Zang, Wu, &amp; Liu</small>		Garbage collection for monitoring parametric properties <small>Jin, Meredith, Griffith, &amp; Roşu</small>	LL(*): The foundation of the ANTLR parser generator <small>Parr &amp; Fisher</small>	<b>COFFEE BREAK</b>			<b>Student Research Competition</b> (A3 & A6)					<b>SIGPLAN Business Meeting</b>															
	Isolating & understanding concurrency errors using reconstructed execution fragments -- Lucia et al.	Automated atomicity-violation fixing <small>Jin, Song, Zhang, Lu, &amp; Liblit</small>	NDSeq: Runtime checking for nondeterministic sequential specifications of parallel correctness		Cause clue classes: Error localization using maximum satisfiability <small>Jose &amp; Majumdar</small>	kb-Anonymity: A model for anonymized behavior-preserving test & debugging data -- Budi, Lo, Jiang, et al.																								
<b>PODC</b>	<b>BRIEF ANNOUNCEMENTS</b>						<b>COFFEE BREAK</b>			Transforming worst-case optimal solutions for simultaneous tasks into all-case... <small>Moses, Tuttle, &amp; Herlihy</small>	Optimal-time adaptive tight renaming, with applications to counting <small>Alistarh, Aspnes, et al.</small>	The round complexity of distributed sorting <small>Patt-Shamir &amp; Teplitzky</small>		A tight unconditional lower bound on distributed random walk computation <small>Nanongkai, Das Sarma, et al.</small>	Minimum congestion mapping in a cloud <small>Bansal, Lee, Nagarajan, &amp; Zafer</small>	Conflict on a communication channel <small>King, Saia, &amp; Young</small>														
<b>SNC</b>		Implicitization of curves and surfaces using predicted support <small>Emiris, Kalinka, &amp; Konaxis</small>	A construction of injective parameterizations of domains for isometric applications <small>Nguyen, Mourrain, &amp; Galligo</small>	Using weighted norms to find nearest polynomials satisfying linear constraints <small>Rezvani &amp; Corless</small>	An effective implementation of symbolic-numeric cylindrical algebraic decomposition for optimiz. probs. <small>Iwane, Yanami, &amp; Anai</small>	<b>COFFEE BREAK</b>			Stokes phenomenon: Graphical visualization and certified computation <small>Richard-Jung</small>	Generating invariants of hybrid systems via sum-of-squares of polynomials with rational coefficients <small>Wu &amp; Yang</small>	Refining and verifying the solution of a linear system <small>Nguyen &amp; Revol</small>	Interval function and its linear least-squares approximation <small>Hu</small>																		
<b>STOC</b>		Distributed verification & the hardness of distributed approximation <small>Das Sarma, Holzer, Kor, Korman, Narongkat, Pandurangan, et al.</small>	Linearizable implementations do not suffice for randomized distributed computation <small>Golab, Higham, &amp; Woelfel</small>	The topology of wireless communications <small>Kantor, Lotker, Parter, &amp; Peleg</small>	Optimal path search in small worlds: Dimension matters <small>Giakkoupis &amp; Schabanel</small>	<b>COFFEE BREAK</b>			Contraction decomposition in H-minor-free graphs and algorithmic applications <small>Demaine, Hajaghayi, et al.</small>	A simpler and shorter proof for the graph minor decomposition <small>Kawarabayashi &amp; Walton</small>	Multicut is fixed-parameter tractable <small>Bousquet, Daligault, &amp; Thomassé / Marx &amp; Razgon</small>	Finding topological subgraphs is fixed-parameter tractable <small>Grohe, Kawarabayashi, Marx, &amp; Wollan</small>																		
		An LLL-reduction with quasi-linear time complexity <small>Novocin, Stehlié, &amp; Villard</small>	NP-hardness of approximately solving linear equations over the reals <small>Khot &amp; Moshkovitz</small>	Black-box identity testing of depth-4 multilinear circuits <small>Saraf &amp; Volkovich</small>	Blackbox identity testing for bounded top fanin depth-3 circuits: The field doesn't matter <small>Saxena &amp; Seshadhri</small>				On the complexity of powering in finite fields <small>Koppary</small>	Almost settling the hardness of noncommutative determinant <small>Chien, Harsha, Sinclair, &amp; Srinivasan</small>	Geometric complexity theory and tensor rank <small>Buergisser &amp; Ikenmeyer</small>	Rank bounds for design matrices w. applications to combinatorial geometry & locally correctable codes <small>Barak, Dvir, Wigderson, &amp; Yehudayoff</small>																		

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### ROOMS

**EC: B**  
**ISCA Session A:** Exhibit Hall 3  
**ISCA Session B:** J  
**Green:** K  
**IWQoS:** F1 & F2

**Metrics Tutorials:** N  
**PLDI Session A:** A3 & A6  
**PLDI Session B:** A4 & A5  
**PODC:** C2 & C3

**SNC:** C1 & C4  
**STOC Session A:** A1 & A8  
**STOC Session B:** A2 & A7

# Wednesday Morning, June 8

	8:15	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30 - 12:30	
<b>3DAPAS</b>	<b>Welcome (at 8:05). Keynote (starts at 8:10): Cloud Computing and the DNA Data Race</b>				Cosmic microwave background data analysis at the peta-scale & beyond		Adaptive, secure, and scalable distributed data outsourcing: A vision.		Towards jungle computing with Iblis/Constellation -- Maassen et al.		<b>COFFEE BREAK</b>		A hierarchical framework for cross-domain MapReduce execution		Joint 3DAPAS & ECMLS Panel <i>Dynamic Distrib. Analysis Environments (for Life Sciences)</i> Geoffrey Fox (Chair), Panelists TBA							
<b>ECMLS</b>	Michael Schatz (Cold Spring Harbor Laboratory)				A parallel random forest classifier for R -- Mitchell, Sloan, et al.		Adapting bioinformatics applications for heterogeneous systems		Characterizing deep sequence analytics using BFAST -- Kim et al.				High-throughput virtual molecular docking: Hadoop implementation..									
<b>Complex</b>					Improved direct product theorems for randomized query complexity Drucker [Best Student Paper Prize]		Making branching programs oblivious requires superlog overhead Beame & Machmouchi		<b>COFFEE BREAK</b>		Hardness of max-2lin and Max-3lin over integers, reals, & large cy O'Donnell, Wu, & Zhou		Lower bounds on query complexity for testing bounded degree CSPs Yoshida		Non-negatively weighted #CSPs: An effective complexity dichotomy Cai, Chen, & Lu							
<b>EC</b>	Liquidity in credit markets: A little trust goes a long way Dandekar, Goel, Govindan, & F				Role of social networks in online shopping: Information passing, price of trust, consumer choice		Who moderates the moderators? Crowdsourcing abuse detection in user-generated content		<b>COFFEE BREAK</b>		Axiomatic attribution for multilinear functions Sun & Sundarajan		Strategic sequential voting in multi-issue domains and multiple-election paradoxes		A game-theoretic analysis of rank-order mechanisms for user-contributed content							
<b>*ISSAC</b>	Tutorial: <i>Hybrid Symbolic-Numeric Methods for the Solution of Polynomial Systems</i> -- Agnes Szanto (North Carolina State)																					
<b>ISCA</b>	Rapid identification of architectural bottlenecks via precise event counting -- Demme et al.				Dark silicon and the end of multicore scaling Esmaelizadeh, Biem, St Ament, et al.		Moguls: A model to explore memory hierarchy for throughput modelling		<b>COFFEE BREAK</b>		Combining memory & a controller w. photonics thru 3D-stacking to enable scalable & energy eff. systs.		The role of optics in future high radix switch design Binkert, Davis, Jouppi, McLaren, et al.									
	A case for heterogeneous on-chip architecture for scalability and service guarantees -- Mishra et al.				Kilo-NOC: A heterogeneous network-on-chip architecture for scalability & service guarantees		DBAR: An efficient routing alg. to support multiple concurrent applications in networks-on-chips				Scalable power control for many-core architectures running multi-threaded applications -- Ma et al.		Energy-efficient cache design using variable-strength error-correcting codes -- Alameldeen, Wagner, et al.									
<b>*MAMA</b>	<b>OPENING</b>	Path-vector routing stability analysis Papadimitriou, Coras, & Cabellos			Deterministic alg. of single failed node recovery in MSR-based dist. storage systs.		Robust heterogeneous data center design: A principled approach -- Garg et al.		<b>COFFEE BREAK</b>		On network criticality in wireless networks Tizghadam & Leon-Garcia		Diffusion & cascading behavior in random networks -- Lelarge									
<b>*METRICS</b>	Tutorial 4: <i>Cloud Datacenter Networks</i> -- Sudipta Sengupta (Microsoft Research)																					
<b>†MRA</b>	<b>OPENING</b>	Otus: Resource attrib. & metrics correlat. in data intensive clusters			Phoenix++: Modular MapReduce for shared-memory systems		Static type checking of Hadoop MapReduce programs		<b>COFFEE BREAK</b>		Invited Talk: <i>Beyond MapReduce</i> Greg Malewicz (Google Research)											
<b>PLDI</b>	Kremlin: Rethinking and re-booting proof for the multicore age -- Garcia, et al.				Automatic parallelization via matrix multiplication Sato & Iwasaki		Alter: Exploiting breakable dependencies for parallelism -- Udupa, Rajan, & Thies		<b>COFFEE BREAK</b>		Panel <i>Teaching Programming Language Design and Implementation ... What? Whom? How?</i> (Exhibit Hall 1)											
	Path-based inductive synthesis for program inversion Srivastava, Gulwani, et al.				Directed incremental symbolic execution Person, Yang, Rungta, et al.		Mining hot calling contexts in small space D'Elia, Demetrescu, & Finocchi															
<b>PODC</b>	<b>BRIEF ANNOUNCEMENTS</b>								<b>COFFEE BREAK</b>		Xheal: Localized self-healing using expanders Pandurangan & Trehan		Fast, compact self-stabilizing verification, computation, & fault detection of an MST		Stability of a peer-to-peer communication system Zhu & Hajek							
<b>†Sci Cloud</b>	Chair's Welcome & ScienceCloud Keynote								<b>COFFEE BREAK</b>		A study of lazy/leager computation in MapReduce -- Morton, Malazinska, et al.		Cloud resource usage -- extreme distributions invalidating traditional models									
<b>SNC</b>	Invited Talk: <i>Accurate and Efficient Expression Evaluation and Linear Algebra</i> -- James Demmel								<b>COFFEE BREAK</b>		Numerical calculation of S-bases for positive dimensional varieties Dayton		An improved method for evaluating max Noether conditions: Case of breadth one -- Li									
<b>STOC</b>	Mechanisms for (mis)allocating scientific credit Kleinberg & Oren		Inner product spaces for minsum coordination mechanisms Cole, Correa, Gkatzelis, et al.		Mechanism design w. uncertain inputs (to err is human, to forgive divine -- Feige & Tennenholtz)		<b>COFFEE BREAK</b>		Online bipartite matching with random arrivals -- Karande, Mehta, & Tripathi / Mahdian & Yan		Almost tight bounds for reordering buffer management Adamaszek, Czumaj, Englert, & Räcke		Santa Claus schedules jobs on unrelated matrices Svensson									
	Don't rush into a union: Take time to find your roots Patrascu & Thorup		A unified framework for approximating and clustering data Feldman & Langberg		Approximate polytope membership queries Arya, da Fonseca, & Mount				K-median clustering, model-based compressive sensing, & sparse recovery for earth mover distance		Breaking the $\epsilon^2$ barrier for explicit RIP matrices Bourgain, Dilworth, Ford, et al.		Deterministic construction of a high dimensional $L_p$ section in $L_1^n$ for any $p < 2$ -- Kärnin									

**PLENARY TALK**  
Exhibit Hall 1  
  
*Warehouse-Scale Computing:  
Entering the Teenage Decade*

Luiz Andre Barroso  
Google

\*Open only to those who registered for this event †HPDC workshop -- those who register for one HPDC workshop can attend them all.

## ROOMS

3DAPAS: Marriott - Willow Glenn 2  
ECMLS: Marriott - Willow Glenn 3  
Complex: Marriott - Ballroom IV  
EC: B

ISSAC Tutorial: F1 & F2

ISCA Session A: Exhibit Hall 3  
ISCA Session B: J  
MAMA: L  
Metrics Tutorials: N

MRA: Marriott - Guadalupe  
PLDI Session A: A3 & A6  
PLDI Session B: A4 & A5  
PODC: C2 & C3

SciCloud: Marriott - Blossom Hill  
SNC: C1 & C4  
STOC Session A: A1 & A8  
STOC Session B: A2 & A7

## Wednesday Afternoon, June 8

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Complex	Symmetric LPDC codes are not necessarily locally testable <small>Ben-Sasson, Maatouk, Shpilka &amp; Sudan</small>			Towards lower bounds on locally testable codes via density arguments <small>Ben-Sasson &amp; Videman</small>			Linear-algebraic list decoding of folded Reed-Solomon codes <small>Guruswamy</small>			Noisy interpolation of sparse polynomials, and applications <small>Saraf &amp; Yekhanin</small>			COFFEE BREAK			Paris-Harrington tautologies <small>Carlucci, Galesi, &amp; Lauria</small>			Relativized separations of worst- & average-case complexities for NP <small>Impagliazzo</small>											
<sup>†</sup> DIDC	Opening	Keynote Address: TBD				Wide area placement of data replicas for fast & highly available data access -- Ping et al.			Preference driven server selection in P2P data sharing systems -- Elwaer et al.			COFFEE BREAK			Early experience with the distributed Nebula cloud -- Sundarajan, Gupta, Ryden, et al.			Toward transparent integration of heterogeneous cloud storage platforms			Clause-iteration w. MapReduce to scalably query data graphs in the SHARD graph store			Integrated data placement & task assignment for scientific workflows in clouds						
EC	Selling privacy at auction <small>Ghosh &amp; Roth</small>			Mechanisms for multi-level auctions -- Emek, Karidi, Tennenholtz, & Zohar			Concordance among holdouts <small>Kominers &amp; Weyl</small>			Only valuable experts can be valued -- Babalioff, Blumrosi, Lambert, & Reingold			Single valued combinatorial auctions with budgets <small>Fiat, Leonardi, Saia, &amp; Sankowski</small>			COFFEE BREAK			Multi-unit auctions: Beyond Roberts <small>Dobzinski &amp; Nisan</small>			Truth, envy, and profit <small>Hartline &amp; Yan</small>			Bayesian mechanism design for budget-constrained agent <small>Chawla, Malec, &amp; Malekian</small>			A truthful randomized mechanism for combinatorial public project via convex optimization - Du <small>Papadimitriou, &amp; Singer</small>		
*ISSAC	Tutorial: <i>The Concrete Tetrahedron</i> -- Manuel Kauers (Research Institute of Symbolic Computation, Johannes Kepler Universität)												COFFEE BREAK			Tutorial (4:10 - 6:30): <i>Probabilistic Analysis of Conditions Numbers</i> -- Peter Bürgisser (University of Paderborn)														
<sup>†</sup> LSAP	Keynote Address: <i>Performance Engineering: A Must for Petascale</i>						Comparison of lock thrashing avoidance methods & implications for lock design			Making a case for distributed file systems at exascale -- Raicu, Foster, & Beckman			COFFEE BREAK			Visual analysis of I/O system behavior for high end computing -- Muelder et al.			Multi-scale analysis of large distributed computing systems - Schnorr, Legrand, & Vincent			An analysis of social gaming networks in on-line and face-to-face bridge communities								
*MAMA	Search in non-homogeneous random environments -- Abdelrahman & Gelenbe			On estimation problems for the G/G/Infinity queue -- Feng, Dube, & Zhang			Dispatching to incentivize fast service in multi-server queues -- Doroudi et al.			The power of partial power of two choices <small>Akgun, Richter, &amp; Wolff</small>			COFFEE BREAK			Settling for less -- A QoS compromise mechanism for opportunistic mobile networks			Investigating the effect of node heterogeneity & network externality on secure adoption			Implications of peer selection strategies by publishers on performance of P2P swarms			How impatience affects the performance & scalability of P2P video-on-demand systems					
*METRICS	*Tutorial 5: <i>Cloud Computing: Recent Trends, Challenges, and Open Problems</i> Andres Lagar-Cavilla & Kaustabh Joshi (AT&T)												COFFEE BREAK			*Tutorial 6: <i>Storage Systems in the Virtualized World</i> Ajay Gulati & Irfan Ahmad (VMware)														
<sup>†</sup> MRA	Tall and skinny QR factorizations in MapReduce architectures			Rapid parallel genome indexing with MapReduce			Full-text indexing for optimizing selection operations in data analytics			MapReducing a genomic sequencing workflow			COFFEE BREAK			Exploring MapReduce efficiency with highly-distributed data			Parallelizing large-scale data processing applications with data skew			Panel: Future of MapReduce for Scientific Computing								
PLDI	Verification of semantic commutativity conditions and inverse ops on linked data			Exploiting the commutativity lattice <small>Kulkarni, Nguyen, et al.</small>			Separation logic + superposition calculus = heap theorem prover -- Pérez et al.			Taming the wildcards: Combining definition- and use-site variance -- Allidor, et al.			Taming wildcards in Java's type system <small>Tate, Leung, &amp; Lerner</small>																	
	Precise & compact modular procedure summaries for heap manipulation progs.			On inter-procedural analysis of programs w. lists & data <small>Bouajani, Drăgoi, Enea, et al.</small>			Scaling abstraction refinement via pruning <small>Liang &amp; Naik</small>			Composable asynchronous events <small>Ziarek, Sivaramakrishnan, et al.</small>			Synchronization via scheduling: Techniques for efficiently managing shared ...																	
PODC	BRIEF ANNOUNCEMENTS												COFFEE BREAK			Tight bounds on information dissemination in sparse mobile networks			Order optimal information spreading using algebraic gossip -- Avin et al.			Time-efficient randomized multiple-message broadcast in radio networks			Network coding: Beating token forwarding lower bounds in dynamic networks.			WRAP UP		
<sup>†</sup> Sci Cloud	Experiences using cloud computing for a scientific workflow application			Cumulus: Open source storage cloud for science -- Bresnahan & Keahey			Adaptive rate stream processing for smart grid applications on clouds -- Simmhan et al.			An automated approach to cloud storage service selection -- Ruiz-Alvarez & Humphrey			COFFEE BREAK			Magellan: Experiences with a science cloud <small>Ramakrishnan, Zbiegajel, Campbell, et al.</small>			Neptune: A domain specific language for deploying HPC software on cloud platforms			Panel (Topic TBD) Followed by Closing Remarks and Best Paper Award at 6:00pm								
SNC	Empirical study of an evaluation-based subdivision algorithm for complex root isolation -- Yap et al.			Roots of the derivatives of some random polynomials <small>Galligo</small>			Numerical stability of Barycentric Hermite root finding <small>Lawrence &amp; Corless</small>			On calculating the rate of linear convergence of non-linear transformed sequences -- Grotendorst			COFFEE BREAK			Extended companion matrix for approximate GCD <small>Boito &amp; Ruatta</small>			A resultant based subspace method for the computation of polynomial GCDs -- Li & Wu			Challenge to fast approximate polynomial GCD computation stably... <small>Sanuki</small>			GCD of multivariate approximate polynomials using beautification... <small>Corless, Postma, &amp; Stoutemyer</small>					
STOC	Schaefer's theorem for graphs <small>Bodirsky &amp; Pinsker</small>			Optimal constant-time approx. algs. and (unconditional) inapprox. results for every bounded-deg. CSP			Every property of hyperfinite graphs is testable <small>Newman &amp; Sohler</small>			Estimating the unseen: An $n/\log(n)$ sample estimator for entropy and support size, shown opt. via ...			COFFEE BREAK			Fast moment estimation in data streams in optimal space <small>Kane, Nelson, Porat, &amp; Woodruff</small>			Subspace embeddings for the $L_1$ -norm with applications <small>Sohler &amp; Woodruff</small>			Near-optimal distortion bounds for embedding doubling spaces into $L_1$ -- Lee & Sidiropoulos			From low-distortion embeddings to uncertainty relations & information locking -- Fawzi, Hayden, & Sen					
	Constant-round non-malleable protocols from any one-way function <small>Goyal / Lin &amp; Pass</small>			Secure computation with information leaking to an adversary <small>Ajtai</small>			How to leak on key updates <small>Lewko, Lewko, &amp; Waters</small>			Near-optimal private approximation protocols via a black-box transformation -- Woodruff			COFFEE BREAK			Submodular func. maximization via multilinear relax. & contention resolution -- Chekuri, Vondrák, Zenklusen			Learning submodular functions <small>Balcan &amp; Harvey</small>			Privately releasing conjunctions and the statistical query barrier <small>Gupta, Hardt, Roth, &amp; Ullman</small>			Privacy-preserving statistical estimation w. optimal convergence rates <small>Smith</small>					
<sup>†</sup> VTDC	Invited Talk: <i>Open Computing Infrastructures for Elastic Services:</i> <small>Shadowfax: Scaling in heterogeneous cluster systems via GPGPU Assemblies</small>						Reactive consolidation of virtual machines enabled by postcopy live migration			COFFEE BREAK			Invited Talk: <i>Challenges in Supporting Virtual Infrastructures</i> <small>Performance of SAP ERP w. memory virtualization using IBM active memory expansion</small>						Practical cloud evaluation from a Nordic eScience user perspective -- Edlund et al.											

\*Open only to those who registered for this event <sup>†</sup>HPDC workshop -- those who register for one HPDC workshop can attend them all.

### ROOMS

Complex: Marriott - Ballroom IV  
 DIDC: Marriott - Willow Glenn 1  
 EC: B  
 ISSAC Tutorial: F1 & F2

LSAP: Marriott - Willow Glenn 2  
 MAMA: L  
 Metrics Tutorials: N  
 MRA: Marriott - Guadalupe

PLDI Session A: A3 & A6  
 PLDI Session B: A4 & A5  
 PODC: C2 & C3

SciCloud: Marriott - Blossom Hill  
 SNC: C1 & C4  
 STOC Session A: A1 & A8  
 STOC Session B: A2 & A7

## Thursday Morning, June 9

	8:15	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30 - 12:30	
<b>Complex</b>				<b>Best Paper Award</b> <i>Non-Uniform ACC Circuit Lower Bounds</i> Ryan Williams				<b>COFFEE BREAK</b>			Improved constructions of three source extractors Li		A new approach to affine extractors and dispersers Li		Symmetry of information & bounds on nonuniform randomness extraction via Kolmogorov extractors Zimand					<b>PLENARY TALK</b> <b>Exhibit Hall 1</b>  <i>Solving Problems with Millions of Humans and Computers</i>  <b>Luis von Ahn</b> <b>Carnegie-Mellon University</b>		
<b>EC</b>			Implementing efficient graphs in connection networks Juarez & Kumar		Optimal cost sharing protocols for scheduling games Falkenhausen & Harks		Non-price equilibria in markets of discrete goods Hassidim, Kaplan, & Mansour			<b>COFFEE BREAK</b>			An optimization-based framework for automated market-making Abernethy, Chen, & Vaughan		Market making in mean reversion price models Chakraborty & Kearns		Pseudorandom financial derivatives Zuckerman					
<b>FOMC</b>		Wel-come	<b>Invited Talk 1: <i>Mining and Modeling Large Scale Cell Phone Data</i></b> J. Bolet				Passively mobile communicating machines that use restricted space Chatzigiannakis, Michail, Nicolou, Pavlogiannis, & Spirakis			<b>COFFEE BREAK</b>			Answer-pairs and processing of continuous nearest-neighbor queries Sistla, Wolfson, Xu, & Rishu		Undirected connectivity of sparse Yao graphs Damian & Kumbhar		Low complexity set reconciliation using Bloom filters Skjegstad & Maseng					
<b>HPDC</b>				<b>Welcome and Opening</b>		<b>Keynote: <i>Exascale Opportunities and Challenge</i></b> Katherine Yelick (UC Berkeley/LBNL)					<b>COFFEE BREAK</b>			Juggle: Proactive load balancing on multicore computers Hofmeyr, Colmenares, Iancu, & Kubiatiowicz		Cache injection for parallel applications Leon, Riesen, Ferreira, & Maccabe						
<b>ISSAC</b>				<b>Opening Remarks</b>		Sparse differential resultant Li, Gao, & Yuan		Deflation and certified isolation of singular zeros of polynomial systems Matzafaris & Mourrain			<b>COFFEE BREAK</b>			Fast algorithm for change of ordering of zero-dimensional Gröbner bases with sparse multiplication matrices Faugère & Mou		Linear algebra to compute syzygies and Groebner bases Cabarcas & Ding						
			Special values of generalized log-sine integrals Borwein & Straub			Formal first integrals along solutions of differential systems I Weil, Aparicio-Monforte, Barkatou, & Simon			Vector rational number reconstruction Bright & Storjohann					Fast Fourier transforms over poor fields Pospelov								
<b>METRICS</b>			<b>Opening Remarks</b>		Modeling program resource demand using inherent program characteristics Chen, John, & Kaseridis		METE: Meeting end-to-end QoS in multicores through system-wide resource management Sharifi, Srikantaiah, Mishra, Kandemir, & Das			<b>COFFEE BREAK</b>			Studying inter-core data reuse in multicores Zhang, Kandemir, & Yemliha		Studying the impact of hardware prefetching and bandwidth partitioning in chip-multiprocessors Liu & Solihin							
<b>SNC</b>	<b>No Morning Schedule. Conference Resumes at 2:00 PM</b>																					

### ROOMS

**Complex:** A3 & A6  
**EC:** B

**FOMC:** E  
**HPDC:** A2 & A7

**ISSAC Session A:** A4 & A5  
**ISSAC Session B:** C2 & C3  
**METRICS:** A1 & A8

## Thursday Afternoon, June 9

	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30	3:40	3:50	4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50
<b>Complex</b>				Near-optimal and explicit Bell inequality violations Buhman, Regev, Scarpa, & de Wolf		Symmetry-assisted adversaries and quantum state generation Ambainis, Magnin, Roettler, & Roland		Approximation algorithms for QMA-complete problems Gharibian & Kempe		On Arthur-Merlin games in communication complexity Klauck & Nanyang		COFFEE BREAK				On the minimal Fourier degree of symmetric Boolean functions Shpilka & Tal		Property testing lower bounds via communication complexity Blais, Brody, & Matulef									
<b>EC</b>	Individual rationality & participation in large scale, multi-hospital kidney exchange Ashlagi & Roth		A random graph model of kidney exchanges: Efficiency, individual-rationality & incentives Toulis & Parkes		The college admissions problem with a continuum of students Leshno & Azevedo		Matching with couples revisited Ashlagi, Braverman, & Hassidim		Multilateral matching Hatfield & Kominers		COFFEE BREAK				Mean-field equilibria of dynamic auctions with learning Iyer, Johari, & Sundararajan		Simplicity-expressiveness tradeoffs in mechanism design Duetting, Fischer, & Parkes		Best-response auctions Nisan, Schapira, Valiant, & Zohar		Money for nothing: Exploiting negative externalities Deng & Pekec		Non-linear price competition and a common agency with informed principals Nazerzadeh & Perakis				
<b>FOMC</b>				Invited Talk 2: <i>Wireless Network Coding</i> S. Katti				MAC design for analog network coding Khabbazi, Kuhn, Lynch, Médard, & ParandehGhalibi		Optimal regional consecutive leader election in mobile ad-hoc networks Chung, Robinson, & Welch		COFFEE BREAK				Energy efficient data gathering in multi-hop hierarchical wireless ad hoc networks Levin, Segal, & Shpungin		Time-optimal information exchange on multiple channels Höfner, Pignolet, Smula, & Wattenhofer		Invited Talk 3: <i>Faster and Better: The Promise of Dynamic Spectrum Access</i> S. Gilbert							
<b>HPDC</b>	Just in time: Adding value to the IO pipelines of high performance applications with JIT staging Abbasi, Wolf, Eisenhauer, Schwan, & Klasky		A cost-intelligent application-specific data layout scheme for parallel file systems Song, Yin, Chen, & Sun		Six degrees of scientific data: Reading patterns for extreme scale science IO Lofsetad, Polte, Gibson, Klasky, Schwan, Oldfield, & Wolf		Introspective end-system modeling to optimize the transfer time of rate based protocols Ahuja & Ghosal		COFFEE BREAK				Algorithm-based recovery for iterative methods without checkpointing Chen		Vrisha: Using scaling properties of parallel programs for bug detection and localization Zhou, Kulkarni, & Bagchi		In context: Simple parallelism for distributed applications Yoo, Lee, Kulkarni, & Killian										
<b>ISSAC</b>				Software Presentations						COFFEE BREAK AND POSTER SESSION		Software Presentations				Maplesoft Presentation											
<b>METRICS</b>				Statistical analysis of QCN: The averaging principle Alizadeh, Kabbani, Atikoglu, & Prabhakar		Stochastic networks with multipath flow control: Impact of resource pools on flow-level performance and network congestion Joseph & de Veciana		Analysis of DCTCP: Stability, convergence, and fairness Alizadeh, Javanmard, & Prabhakar		COFFEE BREAK				Soft error benchmarking of L2 caches with PARMA Suh, Manoochehri, Annavaram, & Dubois		Network architecture for joint failure recovery and traffic engineering Suchara, Xu, Doverspike, Johnson, & Rexford		Record and replay: Partial checkpointing for replay debugging across heterogeneous systems Subhraveti & Nieh		POSTER SESSION 5:30 - 7:00 PM							
<b>SNC</b>				Invited Talk: <i>Polynomial Approximation in Handwriting Recognition</i> Stephen Watt			Acceleration of Newton's polynomial factorization: Army of constraints, convolution, Sylvester matrices, & partial fraction decomposition -- Part		Fast estimates of Hankel matrix condition numbers and numeric sparse interpolation Kaltofen, Lee, & Yang		COFFEE BREAK				A study of Hensel series in general case Sasaki & Inaba		An improvement in the lattice construction process of approximate polynomial GCD over integers Nagasaka		Synthetic division in the context of indefinite summation Zima		Schoenage-Strassen algorithm with MapReduce for multiplying terabit integers Sze						

### ROOMS

**Complex:** A3 & A6  
**EC:** B

**FOMC:** E  
**HPDC:** A2 & A7

**ISSAC:** A4 & A5  
**METRICS:** A1 & A8  
**SNC:** C2 & C3

# Friday, June 10

	8:10	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30 - 12:30		
<b>Complex</b>					Improved pseudo-randomness for regular branching programs Anindya De [Best Student Paper Prize]	Pseudorandom generators for combinatorial checkerboards Watson			<b>COFFEE BREAK</b>			Bounded-depth circuits cannot sample good codes Lovett & Viola	k-Independent Gaussians fools polynomial threshold functions Kane	Explicit dimension reduction and its applications Karnin, Rabani, & Shpilka					<b>PLENARY TALK</b> Exhibit Hall 1  <i>Robots among Us? Human-Robot Interaction Methods for Socially Assistive Robotics</i>  <b>Maja Mataric</b> University of Southern California				
<b>HPDC</b>					<b>Keynote: <i>Energy Efficient E-Putting Everywhere</i></b> Wu-chun Feng (Virginia Tech)						<b>COFFEE BREAK</b>			Toward a profound analysis of bags-of-tricks in parallel systems and their performance impact Tran & Walters	Incremental placement of interactive perception applications Yigitbasi, Mummert, Pillai, Epema								
<b>ISSAC</b>					A refined denominator bounding algorithm for multivariate linear difference equations -- Kauers et al.	2-Descent for second order linear differential equations Fang & van Hoeij			<b>COFFEE BREAK</b>			On the structure of compatible rational functions Chen, Feng, Fu, & Li	On Rota's problem for linear operators in associative algebras Guo, Sit, & Zhang										
					Virtual roots of real polynomials and fractional derivatives Galligo & Bembe	Univariate real root isolation in an extension field Strzebonski & Tsigaridas						Efficient real root approximation Kerber & Sagraloff	A simple but exact and efficient algorithm for complex root isolation Yap, Sagraloff										
<b>METRICS</b>	On the power of (even a little) centralization in distributed processing Tsitsiklis & Xu		Weighted proportional allocation Nguyen & Vojnovic			On the optimal trade-off between SRPT and opportunistic scheduling Aalto, Penttinen, Lassila, & Osti			<b>COFFEE BREAK</b>			Structure-aware sampling on data streams Cohen, Cormode, & Duffield	Gossip PCA Korada, Montanari, & Oh										

	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30	3:40	3:50	4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50			
<b>Complex</b>				Derandomizing polynomial identity testing for multilinear constant-read formulae Anderson, van Melkebeek, & Volkovich	Tensor rank: Some lower and upper bounds Alexeev, Forbes, & Tsimerman			On the sum of square roots of polynomials and related problems Kayal & Saha			Linear systems over finite Abelian groups Chattopadhyay & Lovett																			
<b>HPDC</b>	Live gang migration of virtual machines Deshpande, Wang, & Gopalan			Going back and forth: Efficient hypervisor-independent multi-deployment and multi-snapshotting on clouds Nicolae, Bresnahan, Keahey, & Antoniu			VMFlock: VM co-migration for the cloud Al-Kiswani, Subhraveti, Sarkar, & Ripeanu			Performance and energy modeling for live migration of virtual machines Liu, Xu, Jin, & Gong			<b>COFFEE BREAK</b>			Experiences with self-organizing, decentralized grids using the grid appliance Wolinsky & Figueiredo			Experience of parallelizing cryo-EM 3D reconstruction on a CPU-GPU heterogeneous system Tan			Experience using Smaash to manage data-intensive simulations Hudson, Norris, Reid, Weide, Jordan, & Papka								
<b>ISSAC</b>				<b>Invited Talk: <i>Computational Aspects of Elliptic Curves and Modular Forms</i></b> Victor Miller						Tensor decomposition and moment matrices Bernardi, Comon, Mourrain, & Brachat			GCDs and AGCDs of univariate polynomials by matrix methods Pan, Qian, & Zheng			<b>COFFEE BREAK</b>			Quadratic-time certificates in linear algebra Kaltofen, Nehring, & Saunders			Computing Hermite forms of polynomial matrices Gupta & Storjohann			Symbolic-numeric exact rational linear system solution Saunders, Wood, & Youse			Normalization of row reduced polynomial matrices Sarkar & Storjohann		
							An automatic parallelization framework for algebraic computation systems -- Li & Reis			Detecting genus in vertex links for the fast enumeration of 3-manifold triangulations -- Burton						Division polynomials for Jacobi quartic curves Moody			Using discriminant curves to recover a surface of P <sup>4</sup> from two generic linear projections -- Kaminsky et al			An algorithm for computing set theoretic generators of an algebraic variety -- Guo & Li			Approximate rational solutions for rational ODEs defined on discrete differentiable curves -- Li et al.					
<b>METRICS</b>	<b>SIGMETRICS Rising Star Award Talk</b>						Optimal power cost management using stored energy in data centers Urgaonkar, Urgaonkar, Neely, & Sivasubramaniam			Greening geographical load balancing Liu, Lin, Wierman, Low, & Andrew			<b>COFFEE BREAK</b>			Slick packets Nguyen, Agarwal, Liu, Caesar, Godfrey, & Shenker			Geographical routing in d-dimensional spaces with guaranteed delivery and low stretch Lam & Qian			Model-driven optimization of opportunistic routing Rozner, Han, Qiu, & Zhang								

## ROOMS

Complex: A3 & A6  
HPDC: A2 & A7

ISSAC Session A: C2 & C3  
ISSAC Session B: C1 & C4

METRICS: A1 & A8

## Saturday, June 11

	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:50	12:00	12:10	12:20	12:30	12:40	12:50
<b>HPDC</b>				Supporting GPU sharing in cloud environments with a transparent runtime consolidation framework <small>Ravi, Becchi, Agrawal, &amp; Chakradhar</small>	Tradeoffs between profit and customer satisfaction for service provisioning in the cloud <small>Chen, Wang, Zhou, Sun, Lee, &amp; Zomaya</small>			<b>COFFEE BREAK</b>			Dynamic adaptive scheduling for virtual machines <small>Weng, Liu, Yu, &amp; Li</small>		Enhancements of Xen's scheduler for MapReduce workloads <small>Kang, Chen, Wong, Sion, &amp; Wu</small>			<b>Panel: <i>The Future of Parallel and Distributed Computing</i></b>						<b>AWARDS AND CLOSING</b>					
<b>ISSAC</b>				Supersparse black box rational function interpolation <small>Kaltofen &amp; Nehring</small>	Diversification improves interpolation <small>Giesbrecht &amp; Roche</small>			<b>COFFEE BREAK</b>			Generating subfields <small>Novocin, van Hoeij, &amp; Klüners</small>		Practical polynomial factorization in polynomial time <small>Novocin, Hart, &amp; van Hoeij</small>			<b>Invited Talk: <i>Recent Progress in Linear Algebra for Lattice Basis Reduction</i></b>  Gilles Villard											
<b>METRICS</b>	<b>SIGMETRICS Achievement Award Talk</b> (8:15 - 9:15 AM)			Walking on a graph with a magnifying glass: Stratified sampling via weighted random walks <small>Kurant, Gjoka, Butts, &amp; Markopoulou</small>			Topology discovery of sparse random graphs with a few participants <small>Anandkumar, Hassidim, &amp; Kelnner</small>			<b>COFFEE BREAK</b>			Characterizing and modeling Internet traffic dynamics of cellular systems <small>Shafiq, Ji, Liu, &amp; Wang</small>		Cellular data network infrastructure characterization and implications on mobile content placement <small>Xu, Huang, Wang, Qian, Gerber, &amp; Mao</small>		Fine-grained latency and loss measurements in the presence of reordering <small>Lee, Goldberg, Kompella, &amp; Varghese</small>		On the stability and optimality of universal swarms <small>Zhou, Ioannidis, &amp; Massoulié</small>								

	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30	3:40	3:50	
<b>ISSAC</b>				Computing comprehensive Gröbner systems and comprehensive Gröbner bases simultaneously <small>Kapur, Sun, &amp; Wang</small>	Computing a structured Gröbner basis approximately <small>Nagasaka</small>			A generalized criterion for signature related Gröbner basis algorithms <small>Sun &amp; Wang</small>			Signature-based algorithms to compute Groebner bases <small>Perry &amp; Eder</small>			<b>Closing Remarks</b>		
				Algebraic analysis of asymptotic stability of continuous dynamical systems <small>She, Xue, &amp; Zheng</small>	Verification and synthesis using real quantifier elimination <small>Sturm &amp; Tiwari</small>			The minimum-rank Gram matrix computation via fixed point continuation method <small>Ma &amp; Zhi</small>			On the reachability of the infimum of an unconstrained global optimization problem & real equation solving -- Gruet & El Din					

## ROOMS

HPDC: A2 & A7

ISSAC Session A: C2 & C3  
ISSAC Session B: C1 & C4

METRICS: A3 & A6