

UCNC 2017 Schedule

June 5-9, 2017

University of Arkansas, Fayetteville, AR

All conference and workshop talks will be held in the Hillside Auditorium (<http://fulbright.uark.edu/deans-office/facilities/hillside-auditorium.php>)

	Monday, June 5	Tuesday, June 6	Wednesday, June 7	Thursday, June 8	Friday, June 9		
9:00	Welcome & registration	[UCNC Tutorial] Ways to Compute in Euclidean Frameworks (Jerome Durand-Lose)	[UCNC Tutorial] Ways to Compute in Euclidean Frameworks (Jerome Durand-Lose)		Self-Assembly of Shapes at Constant Scale using Repulsive Forces (Luchsinger, Schweller, and Wylie)	9:00	
9:15						9:15	
9:30	[UCNC Invited Talk] High-speed AFM imaging of synthetic nanomachines and nanostructures (Masayuki Endo)				Verification in Staged Tile Self-Assembly (Schweller, Winslow, and Wylie)	9:30	
9:45				[UCNC Tutorial] Ways to Compute in Euclidean Frameworks (Jerome Durand-Lose)		9:45	
10:00		Break	Break		Self-Assembly of 4-sided Fractals in the Two-handed Tile Assembly Model (Hendricks and Opseth)	10:00	
10:15		Superposition as memory: unlocking quantum automatic complexity (Kjos-Hanssen)	[UCNC Tutorial] Decision making by photonics: experiment and category theoretic foundation (Makoto Naruse)		Break	10:15	
10:30	Break			Break		10:30	
10:45	Temporal logic computation using DNA strand displacement reactions (Lakin and Stefanovic)	Break			Self-Assembled DC Resistive Circuits with Voltage Controlled Growth (Deaton, Yasmin, Moore, and Garzon)	10:45	
11:00		[UCNC Invited Talk] Computing with Glue, Balls, and Recycled Bits: New Physical Models of Computing (Erik Demaine)		[Membrane Computing Workshop Invited Talk] Integrating regulatory information via combinatorial control of gene expression (Alvaro Sanchez)		11:00	
11:15	Real-Time Computability of Real Numbers by Chemical Reaction Networks (Huang, Klinge, Lathrop, Li, and Lutz)				Morphogenetic and Homeostatic Self-Assembled Systems (Sosik, Smolka, Drastik, Moore, and Garzon)	11:15	
11:30						11:30	
11:45	Platform color designs for interactive molecular arrangements (Braun, Cruz, and Jonoska)		Break		Descrambling Order Analysis in Ciliates (Khan and McQuillan)	11:45	
12:00		Lunch	Lunch, Excursion, & Banquet 1:00 Depart by bus (boxed lunch provided) 1:30-5:00 Excursion: Crystal Bridges Museum of American Art (http://crystalbridges.org) 6:00-8:00 Banquet: Botanical Garden of the Ozarks (https://bgozarks.org)	Lunch		12:00	
12:15	Lunch						12:15
12:30							12:30
12:45							12:45
1:00		Oritatami Workshop Invited Talk (Cody Geary)			[Membrane Computing Workshop Invited Talk] Tools for analyzing P systems and other multiset rewriting-based models (Sergey Verlan)		1:00
1:15	[UCNC Invited Talk] The Power of Analogue-Digital Machines (Jose Felix Costa)						1:15
1:30						1:30	
1:45						1:45	
2:00		Break		Break		2:00	
2:15	Break	[Oritatami Workshop] Ruleset Optimization on Isomorphic Oritatami Systems (Han and Kim)		UCNC Business Meeting		2:15	
2:30	Quantum-dot Cellular Automata: a Clocked Architecture for High-speed, Energy-efficient Molecular Computing (Blair)					2:30	
2:45		[Oritatami Workshop] Bit string bifurcation by cotranscriptional folding (Masuda, Seki, and Ubukata)				2:45	
3:00	Analysis on the Nested Duplication String System and Its Capacity (Cho, Han, and Kim)					3:00	
3:15		Break		Poster Session		3:15	
3:30	Break	[Oritatami Workshop Invited Talk] Folding Turing is hard but feasible (Nicolas Schabanel)				3:30	
3:45	Universal Matrix Insertion Grammars with Small Size (Fernau, Kuppusamy, and Verlan)					3:45	
4:00						4:00	
4:15	[Physics & Computation Workshop Contributed Talk] A Physical Machine Based on a Super-Turing Computational Model (Younger, Redd, Siegelmann, and Bell)					4:15	
4:30						4:30	
4:45						4:45	
	Welcome Reception 5:00-7:00pm Chancellor Hotel (http://www.hotelchancellor.com)						