Dagstuhl Seminar 22492 - Tentative Program

	05/12 **MONDAY**	06/12 **TUESDAY**	07/12 **WEDNESDAY**	08/12 **THURSDAY**	09/12 **FRIDAY**
09:00	Tutorial: Victor Vafeiadis	Tutorial: Ahmed Bouajjani	Rupak Majumdar: PCTCP: Randomized Testing for Distributed Systems	Philipp Woelfel: Predictable building blocks for randomized shared memory algorithms	Breakout Discussions and Future Plans
09:30	Verification of Concurrent Data Structures	Verification of Distributed Systems	Yoram Moses: Reachability in Distributed Algorithms	Maurice Herlihy: TBA	
10:00			Serdar Tasiran: Formal Methods for Distributed Systems at Amazon	Thomas Wies: Reasoning Principles for Verifying Concurrent Search Structures	
10:15	Break	Break			
10:30			Break	Break	Break
10:45	Tutorial: Pierre Fraigniaud	Tutorial: Petr Kuznetsov			
11:00	Distributed Certification	Correctness for Concurrent Data Structures	Stephan Merz: Verifying Models of Distributed Algorithms in TLA+: TLC, Apalache, and TLAPS	Azalea Raad: Extending Intel-x86 Consistency and Persistency	Breakout Discussions
11:30			Giuliano Losa: Formally verifying a classic distributed algorithm with inductive invariants	Armando Castañeda: Asynchronous Runtime Verification and Enforcement of Linearizability	
12:00	Lunch break	Lunch break	Lunch break	Lunch break	Lunch break
12:30					

13:00			Excursion	
13:30	Introductions			
14:00	Bernd Finkbeiner: Hyperproperties in Synthesis and Verification	Jennifer Welch: Implementing Shared Objects in the Presence of Churn		Nathalie Bertrand: Predicate abstraction refinement to prove correctness of fault-tolerant distributed algorithms
14:30	Parosh Aziz Abdula: Checking Liveness through Probabilistic Fairness on Weakly Consistent Platforms	Ori Lahav: Abstraction for Crash-Resilient Objects		Rotem Oshman: Truthful Information Dissemination in Asynchronous Networks
15:00	Break	Break		Break
15:30	Applications in Industry Panel: Rupak Majumdar (moderator)	Burcu Kulahcioglu Ozkan: Testing Blockchain Consensus Algorithms		Pierre Fraigniaud: A Speedup Theorem for Asynchronous Computation
16:00		Annette Bieniusa: Highly-available Access control in Distributed Systems		Sandeep Kulkarni: Eventually Correct Efficient Programs
16:30		Alexey Gotsman and Gregory Chockler: Synchronizer - a recipe for building correct algorithms under partial synchrony		Hagit Attiya: (Approximately) Preserving Hyper-Properties without Strong Linearizability
17:00				
17:30				
18:00	Dinner	Dinner	Dinner	Dinner