Dagstuhl Seminar 23112 Schedule

Moday, March 13

9:00-12:00: Morning Session: Reasoning at Scale about Real-World Systems

- Peter Müller: *Verified Secure Routing* (1hr)

Coffee break at 10:00 (20m), continuing talks at 10:20

- Igor Konnov: *Improving usability of TLA+ tools for blockchain engineers* (25m)
- Rupak Majumdar: *Random testing of distributed systems* (25m)
- Burcu Kulahcioglu Ozkan: *Random testing of Byzantine fault tolerant algorithms* (25m)

12:15-13:30: Lunch

13:30-15:30: Decidable Verification and Synthesis

- Ken McMillan: *Techniques for decidable verification* (1hr)
- Lenore Zuck: *A not very simple protocol whose automated proof is* ???? (30m)
- Kedar Namjoshi: *Interactive Synthesis of Distributed Protocols* (30m)

15:30-16:00: Coffee break

16:00-18:00: Evening Session: Semantic Models for Distributed Protocols

- Ori Lahav: Potential-based semantics for causally consistent shared memory (30m)
- Lindsey Kuper: *Verified causal broadcast with Liquid Haskell* (30m)
- Ilya Sergey: *Reasoning about Byzantine Accountability* (30m)
- Mike Dodds: *Pushing Formal Methods Tools to Industry* (10m)

18:00: Dinner

Tuesday, March 14

9:00-12:00: Morning Session: Parameterised Verification

- Swen Jacobs: *Parameterized Model Checking and Synthesis* (1hr)

Coffee break at 10:00 (20m), continuing talks at 10:20

- Marijana Lazic: *Parameterized Verification of Randomized Consensus Algorithms* (30m)
- Javier Esparza: *Verifying almost-sure termination of replicated systems* (30m)
- Constantin Enea: *Commutativity Quotients of Concurrent/Distributed Algorithms* (30m)

12:15-13:30: Lunch

13:30-15:30: Free-Form Discussions in the Coffee Room
Propose topics to discuss on the whiteboard in the seminar room!

15:30-16:00: Coffee

16:00-18:00: Evening Session: Decidability & Programming Language Techniques
- Laura Bocchi: *Session types, time, timeouts* (30m)
- Nobuko Yoshida: *Asynchronous Message Passing Optimisation with MPST* (30m)
- Sharon Shoham: *Finding Infinite Counter-Models in Deductive Verification* (30m)
- Roopsha Samanta: *Taming Unbounded Distributed Systems with Modular, Bounded Verification* (10m)

18:00: Social Event (aka Fancy Dinner)

Wednesday, March 15

9:00-10:00: Morning Session
- Jamie Gabbay: *Semitopologies for heterogeneous consensus* (1hr)

Coffee break at 10:00 (20m), continuing talks at 10:20

- Gowtham Kaki: *Verifying Indistinguishability of Secure Communication Protocols* (30m)
- Giuliano Losa: *A simple proof of FLP* (15m)

More Free-Form Discussions; Departure