

## Dagstuhl Seminar 16471 - "Concurrency with Weak Memory Models: Semantics, Languages, Compilation, Verification, Static Analysis, and Synthesis"

### Monday 21 November 2017

9:00 - 9:30	Welcome
9:30 - 10:15	<b>Tony Hoare - Discrete Geometric Representation of Concurrent Program Execution</b>
10:15 - 10:45	Coffee/Tea Break
10:45 - 11:30	<b>Paul McKenney - Linux-Kernel Memory Ordering: Help Arrives At Last!</b>
11:30 - 12:15	<b>Richard Bornat - New Lace is a Program Logic for Weak Memory (Probably)</b>
12:15 - 14:00	Lunch
14:00 - 14:15	<b>Andrea Cerone - Analyzing Snapshot Isolation</b>
14:15 - 15:00	<b>Simon Castellan - Weak Memory Models Using Event Structures</b>
15:00 - 15:30	<b>Pierre Clairambault - Game Semantics Based on Event Structures</b>
15:30 - 16:00	Coffee/Tea & Cake Break
16:00 - 16:45	<b>Glynn Winskel - Event Structures and Stable Families</b>
16:45 - 17:30	<b>Stephen Brookes - A Denotational Semantics for Weak Memory Concurrency</b>
18:00	Dinner

### Tuesday 22 November 2017

9:00 - 9:30	<b>Luc Maranget - Taming CAT</b>
9:30 - 10:00	<b>Caroline Trippel - TriCheck: Memory Model Verification at the Trisection of Software, Hardware, and ISA</b>
10:00 - 10:30	<b>Yatin Manerkar - C11 Compiler Mappings: Exploration, Verification, and Counterexamples</b>
10:30 - 11:00	Coffee/Tea Break
11:00 - 11:30	<b>Ori Lahav - A Promising Semantics for Relaxed Concurrency</b>
11:30 - 12:00	<b>Patrick Cousot - Proof of Mutual Exclusion and Non-Starvation of a Program PostgreSQL</b>
12:15 - 14:00	Lunch
14:00 - 14:30	<b>Viktor Vafeiadis - Explaining Relaxed Memory Models with Program Transformations</b>
14:30 - 15:00	<b>Suzanne Shoaraee - Data Consistency Check of Very Large Execution Traces</b>
15:00 - 15:30	<b>Daniel Lustig - Automatic Synthesis of Comprehensive Litmus Test Suites</b>
15:30	Coffee/Tea & Cake Break
18:00	Dinner

### Wednesday 23 November 2017

9:00 - 9:30	<b>Vincent Nimal - Musketeer in Dagstuhl: Automated Fencing in Software?</b>
9:30 - 10:00	<b>Gustavo Petri - Verifying Concurrent Garbage Collector</b>

10:00 - 10:30	<b>Stephan Diestelhorst - Embedding Transactions in Weak Memory Models</b>
10:30 - 11:00	Coffee/Tea Break
11:00 - 11:30	<b>Susmit Sarkar - Mixing It Up, Concurrency at Many Sizes</b>
11:30 - 12:00	<b>Maged Michael - Hazard Pointers: C++ Memory Ordering Issues</b>
12:15	Lunch
13:30 - 18:00	Excursion/Free Time
18:00	Dinner
<b>Thursday 24 November 2017</b>	
9:00 - 9:30	<b>Annette Bieniusa - Transactions on Mergeable Objects in Shared-Memory</b>
9:30 - 10:00	<b>David Delmas - A Plea for Industrial-Strength Formal Methods for Concurrent Software</b>
10:00 - 10:30	<b>Antoine Miné - Static Analysis by Abstract Interpretation of Numeric Properties of Programs under Weak Memory Models</b>
10:30 - 11:00	Coffee/Tea Break
11:00 - 11:30	<b>Daryl Stewart - From Architecture to Implementation</b>
11:30 - 12:00	<b>Derek Williams - The Sad Ballad of 2+2W+LWSYNC</b>
12:00 - 12:15	<b>Will Deacon - Formalising the ARM Memory Model... Again</b>
12:15 - 14:00	Lunch
14:00 - 14:30	<b>Sizhuo Zhang - Weak Memory Models: Balancing Definitional Simplicity and Implementation Flexibility</b>
14:30 - 15:00	<b>Roland Meyer</b>
15:00 - 15:30	<b>Giovanni Bernardi - Robustness against Consistency Models with Atomic Visibility</b>
15:30 - 16:00	Coffee/Tea & Cake Break
16:00 - 16:30	<b>Bernhard Kragl - Inductive Verification of Message-Passing Programs</b>
18:00	Dinner
<b>Friday 25 November 2017</b>	
9:00 - 9:30	<b>Paul-Andre Mellies - Is There Something Like A Geometry of Weak Memory Models?</b>
9:30 - 10:00	<b>Helmut Seidl - Reachability for Dynamic Parametric Processes</b>
10:00 - 10:30	<b>Andrei Dan - Modeling and Analysis of Remote Memory Access Programming</b>
10:30	Coffee/Tea Break
12:15	Lunch