#### DAGSTUHL SEMINAR 10252

# Game Semantics and Program Verification

#### Lecture Hall Saarbrücken

#### Monday 21st June

09:00-09:15	Welcome
09:15-10:15	Dan Ghica: Game semantics for program verification
	Coffee Break/Discussions
10:45 - 11:45	Andrzej Murawski: Game semantics and automata
	LUNCH
14:15 - 15:15	Naoki Kobayashi: Model-checking higher-order programs
	Coffee Break/Discussions
16:00 - 17:00	Martin Hofmann: Purity of second-order functionals

### Tuesday 22nd June

09:00 - 10:00	Peter Habermehl: Regular model checking
10:00 - 10:30	Jérôme Leroux: VAS reachability by Presburger inductive invariants
	Coffee Break/Discussions
11:00 - 11:45	Grégoire Sutre : Reachability analysis for pushdown concurrent systems
	LUNCH
14:00 - 14:45	Helmut Seidl: Strategy iteration: abstract interpretation meets game theory
15:00 - 15:30	Nikos Tzevelekos: Functional reachability
	Coffee Break/Discussions
16:00 - 16:45	Paul Levy: Operational game semantics

### Wednesday 23rd June

09:00-10:00	Markus Müller-Olm: Optimal analysis of threads and procedures
	Coffee Break/Discussions
10:15-11:45	Olivier Laurent: Game semantics for logic
	Paul-André Melliès: : Asynchronous games
12:00	Group Photo Session (front of the chapel)
	LUNCH

EXCURSION

### Thursday 24th June

09:00 - 10:00	Damian Niwiński: A gentle introduction to panic automata
	Noam Zeilberger: Polarity and double-negation translation
	Coffee Break/Discussions
10:15-11:45	Julian Gutierrez: Model-checking partial-order models of concurrency
	Lijun Zhang: Concurrency and composition in a stochastic world
	Lunch
14:00 - 15:30	Pierre Clairambault: Fixed points in games
	James Laird: Genericity and polymorphism
	Coffee Break/Discussions
16:00 - 16:45	Ugo Dal Lago: Functional programming in sublinear space

## Friday 25th June

 $\mathbf{09:15} - \mathbf{10:45}$  Alexis Goyet: Lambda-bar calculus

Etienne Lozes: Model-checking the contracts of heap-hop

Coffee Break/Discussions

Lunch