# SCHLOSS DAGSTUHL
## Leibniz-Zentrum für Informatik

**31 March - 4 April**

## Reachability Problems for Infinite-State Systems

## Schedule

*Monday 31 March*

| | | |
|---|---|---|
| **0900** | **Opening/Introduction** | |
| 0930 | Survey: Jérôme Leroux | |
| **1030** | **Coffee break** | |
| 1045 | Michael Blondin | *Handling Infinitely Branching WSTS* |
| 1115 | Christoph Haase | *Subclasses of Presburger Arithmetic and the Weak EXP* |
| 1145 | Petr Jancar | *Equivalences of Deterministic Systems as Reachability Problems* |
| **1215** | **Lunch and discussions** | |
| **1530** | **Cake break** | |
| 1600 | Giorgio Delzanno | *Infinite-State Model Checking with Data Recycling* |
| 1630 | Barbara König | *Well-Structured Graph Transformation Systems* |
| **1700** | **Break** | |
| 1715 | Peter Habermehl | *Temporal Logics and Automata on Multi-attributed Data Words with Ordered Navigation* |
| **1800** | **Dinner** | |

**31 March - 4 April**

## Reachability Problems for Infinite-State Systems

## Schedule

*Tuesday 1 April*

| | | |
|---|---|---|
| 0900 | Survey: Sylvain Schmitz | |
| 1000 | Philippe Schnoebelen | *Ackermann-hardness for Monotone Counter Systems* |
| **1030** | **Coffee break** | |
| 1045 | Ranko Lazic | *Non-Elementary Complexities for Branching VASS, MELL, and Extensions* |
| 1115 | Richard Mayr | *Deciding Coverability in Non-monotone Infinite-state Systems* |
| 1145 | Fernando Rosa-Velardo | *Unordered Data Nets are as Hard as Lossy Channel Systems* |
| **1215** | **Lunch and discussions** | |
| **1530** | **Cake break** | |
| 1600 | Jeffrey Shallit | *Critical Exponents of k-automatic Words and Generalizations* |
| 1630 | Igor Potapov | *Reachability Problems for Braids, Knots, and Links - New Challenges for Computer Science* |
| **1700** | **Break** | |
| 1715 | Mohammad-Faouzi Atig | *Timed Pushdown Automata* |
| 1745 | Diego Figueira | *Reasoning About Data Repetitions with Counter Systems* |
| **1800** | **Dinner** | |

**31 March - 4 April**

# Reachability Problems for Infinite-State Systems

## Schedule

*Wednesday 2 April*

| | | |
|---|---|---|
| 0900 | Survey: Joel Ouaknine | |
| 1000 | Radu Iosif | *Safety Problems are NP-complete for Flat Integer Programs with Octagonal Loops* |
| **1030** | **Coffee break** | |
| 1045 | James Worrell | *Ultimate Positivity is Decidable for Simple Linear Recurrent Sequences* |
| 1115 | Bernard Boigelot | *Symbolic Hybrid Transduction* |
| 1145 | Amir Ben-Amram | *Linear Ranking Functions for Loops with a Precondition* |
| **1215** | **Lunch and excursion** | |
| **1800** | **Dinner** | |

**31 March - 4 April**

## Reachability Problems for Infinite-State Systems

## Schedule

*Thursday 3 April*

| | | |
|---|---|---|
| 0900 | Survey: Wolfgang Thomas | |
| 1000 | Véronique Bruyère | *Secure Equilibria in Weighted Games* |
| **1030** | **Coffee break** | |
| 1045 | Laurent Doyen | *Reachability in Partial-Observation Stochastic Games* |
| 1115 | Mikolaj Bojanczyk | *Looping Over Infinite Structures* |
| 1145 | Slawomir Lasota | *Turing Machines Over Infinite Alphabets* |
| **1215** | **Lunch and discussions** | |
| **1530** | **Cake break** | |
| 1600 | Igor Walukiewicz | *Models of the lambdaY-calculus for Weak Monadic Second-Order Logic* |
| 1630 | Olivier Bournez | *On the Hardness of Solving Ordinary Differential Equations* |
| **1645** | **Break** | |
| 1715 | Jean Goubault-Larrecq | *The VJGL Lemma* |
| 1745 | Tomas Brazdil | *Zero-Reachability in Probabilistic Multi-Counter Automata* |
| **1800** | **Dinner** | |

**31 March - 4 April**

## Reachability Problems for Infinite-State Systems

## Schedule

*Friday 4 April*

| | |
|---|---|
| 0900 | Talks |
| **1030** | **Coffee break** |
| 1045 | Talks |
| **1215** | **Lunch and leave** |