

Dagstuhl Seminar 15401
Circuits, Logic and Games

Monday 28 September 2015

- 09:00–10:30 Introduction session, followed by
Thomas Colcombet
Combinatorial Expressions and Lower Bounds
- 10:30–11:00 Coffee
- 11:00–
Charles Paperman
Finite-Degree Predicates and Two-Variable First-Order Logic
Kamal Lodaya
Unary temporal logic and two-variable FO logic with threshold counting
- 12:15 Lunch
- 15:30 Cake
- 16:00–
Thomas Zeume
Small Dynamic Complexity Classes
Anish Mukherjee
Dynamic Complexity of Reachability and Related Problems
Nils Vortmeier
Static Analysis for Logic-Based Dynamic Programs
- 18:00 Dinner

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Tuesday 29 September 2015

- 09:00–10:00 *Martin Grohe*
Color Refinement
- 10:30–
Christoph Berkholz
Limitations of Algebraic Approaches to Graph Isomorphism Testing
Michael Elberfeld
Canonizing Graphs of Bounded Tree Width in Logspace
Sebastian Siebertz
On the generalised colouring numbers of proper minor closed classes
- 16:00–17:00 *Anuj Dawar*
Lower Bounds for Symmetric Circuits
- 17:10–18:00 *Dimitri Surinx*
Converse elimination in the algebra of binary relations
Aiswarya Cyriac
Model checking distributed algorithms against propositional dynamic logic with data

Wednesday 30 September 2015

- 09:00–10:00 *Nutan Limaye*
Arithmetic Circuit Lower Bounds
- 10:30–
B V Raghavendra Rao
An exponential lower bound for the sum of products read once formulas
Stefan Mengel
A Strongly Exponential Separation of DNNFs from CNF Formulas
Jan Johannsen
Backdoors into two occurrences

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Thursday 1 October 2015

- 09:00–10:00 *Olaf Beyersdorff*
Lower bounds: from circuits to QBF proof systems
- 10:30–11:30 *A. V. Sreejith*
Crane Beach conjecture and modulo counting quantifiers
Anca Muscholl
Word transducers: from 2-way to 1-way
- 11:30–11:45 *Michael Wagner (DBLP)*
About DBLP
- 16:00–17:00 *Jean-Eric Pin*
 AC^0 and first order logic, a new approach based on ultrafilters on words.
Klaus-Jörn Lange
Quantifying over tuples with algebra - the multidimensional blockproduct
- 17:10–18:00 **Open problems**

Friday 2 October 2015

- 09:00–10:30 *Meena Mahajan*
QBF Resolution: How important is width?
Rohit Gurjar
Bipartite matching is in Quasi-NC.
Michaël Cadilhac
Transductions: From circuits to continuity
- 11:00–12:00 **Free Slots**