



13th International Workshop
Descriptive Complexity of Formal
Systems (DCFS)
July 25–27, 2011 Giessen/Limburg, Germany



Program

Sunday, July 24, 2011	
16:00 – 20:00	Registration
18:00 – 20:00	Welcome reception

Monday, July 25, 2011	
08:15 – 08:45	Registration
08:45 – 09:00	Opening of DCFS 2011
09:00 – 10:00	<i>Invited:</i> Denis Thérien: <i>The Power of Diversity</i>
10:00 – 10:30	Erik D. Demaine, Sarah Eisenstat, Jeffrey Shallit and David A. Wilson: <i>Remarks on Separating Words</i>
10:30 – 11:00	Coffee break
11:00 – 11:30	Andreas Malcher, Carlo Mereghetti and Beatrice Palano: <i>Descriptive Complexity of Two-Way Pushdown Automata With Restricted Head Reversals</i>
11:30 – 12:00	Jiří Wiedermann: <i>Complexity of Nondeterministic Multitape Computations Based on Crossing Sequences</i>
12:00 – 12:30	Fernando Arroyo, Juan Castellanos and Victor Mitrană: <i>On the Degree of Team Cooperation in Grammar Systems</i>
12:30 – 14:00	Lunch
14:00 – 15:00	<i>Invited:</i> Friedrich Otto: <i>On Restarting Automata with Window Size One</i>
15:00 – 15:30	Erzsébet Csuhaj-Varjú and György Vaszil: <i>On the Size of Clustered Parallel Communicating Grammar Systems</i>
15:30 – 16:00	Coffee break
16:00 – 16:30	Kamal Lodaya, Madhavan Mukund and Ramchandra Phawade: <i>Kleene Theorems for Product Systems</i>
16:30 – 17:00	Business Meeting
18:30 –	Guided city tour Limburg

Tuesday, July 26, 2011	
08:15 – 08:30	Registration
08:30 – 09:30	<i>Invited:</i> Jarkko Kari: <i>Linear Algebra Based Bounds for One-dimensional Cellular Automata</i>
09:30 – 10:00	Levent Alpoge, Thomas Ang, Luke Schaeffer and Jeffrey Shallit: <i>Decidability and Shortest Strings in Formal Languages</i>
10:00 – 10:30	Coffee break
10:30 – 11:00	Yuan Gao and Sheng Yu: <i>State Complexity of Four Combined Operations Composed of Union, Intersection, Star and Reversal</i>
11:00 – 11:30	Janusz Brzozowski, Baiyu Li and Yuli Ye: <i>Syntactic Complexity of Prefix-, Suffix-, and Bifix-Free Languages</i>
11:30 – 12:00	Māris Valdatš: <i>Transition Function Complexity Of Finite Automata</i>
12:00 – 13:15	Lunch
13:15 –	Excursion und conference dinner

The city of Limburg, where DCFS 2011 takes place at the Dom Hotel, lies in the west of the province Hessen between the Taunus and the Westerwald in the beautiful Lahn valley and it looks back on a history of more than 1100 years.



The picture shows the Limburger Dom and the River Lahn. The Limburger Dom—at the edge of the town on a rock rather than in the city center—was build in Merovingian times and is dedicated to St. George.

Wednesday, July 27, 2011	
08:15 – 09:00	Registration
09:00 – 10:00	<i>Invited:</i> Stefan Schwoon: <i>Efficiently Unfolding Contextual Petri Nets</i>
10:00 – 10:30	Jean-Marc Champarnaud, Jean-Philippe Dubernard, Franck Guingne and Hadrien Jeanne: <i>Geometrical Regular Languages and Linear Diophantine Systems</i>
10:30 – 11:00	Coffee break
11:00 – 11:30	Oscar H. Ibarra and Nicholas Q. Tran: <i>On Synchronized Multitape and Multihead Automata</i>
11:30 – 12:00	Zuzana Bednářová, Viliam Geffert, Carlo Mereghetti and Beatrice Palano: <i>The Size-Cost of Boolean Operations on Constant Height Deterministic Pushdown Automata</i>
12:00 – 12:30	Xiaoxue Piao and Kai Salomaa: <i>State Trade-offs in Unranked Tree Automata</i>
12:30 – 14:00	Lunch
14:00 – 14:30	Sherzod Turaev, Jürgen Dassow and Mohd Hasan Selamat: <i>Language Classes Generated by Tree Controlled Grammars with Bounded Nonterminal Complexity</i>
14:30 – 15:00	Jürgen Dassow, Florin Manea and Bianca Truthe: <i>On Contextual Grammars with Subregular Selection Languages</i>
15:00 – 15:30	Radu Gramatovici and Florin Manea: <i>k-Local Internal Contextual Grammars</i>
15:30 – 16:00	Coffee break
16:00 – 16:30	Galina Jirásková and Tomáš Masopust: <i>On the State Complexity of Projected Languages</i>
16:30 – 17:00	Galina Jirásková and Juraj Šebej: <i>Note on Reversal of Binary Regular Languages</i>
17:00 – 17:30	Michal Kunc and Alexander Okhotin: <i>State Complexity of Operations on Two-Way Deterministic Finite Automata Over a Unary Alphabet</i>
17:30	Closing of DCFS 2011