

34th Symposium on Theoretical Aspects of Computer Science

STACS 2017, March 8–11, 2017, Hannover, Germany

Edited by

Heribert Vollmer

Brigitte Vallée



Editors

Heribert Vollmer	Brigitte Vallée
Institut für Theoretische Informatik	GREYC, UMR CNRS 6072
Leibniz Universität Hannover	Université de Caen Normandie
Hannover, Germany	Caen, France
vollmer@thi.uni-hannover.de	Brigitte.Vallee@unicaen.fr

ACM Classification 1998

F.1.1 Models of Computation, F.2.2 Nonnumerical Algorithms and Problems, F.4.1 Mathematical Logic, F.4.3 Formal Languages, G.2.1 Combinatorics, G.2.2 Graph Theory

ISBN 978-3-95977-028-6

Published online and open access by

Schloss Dagstuhl – Leibniz-Zentrum für Informatik GmbH, Dagstuhl Publishing, Saarbrücken/Wadern, Germany. Online available at <http://www.dagstuhl.de/dagpub/978-3-95977-028-6>.

Publication date

March, 2017

Bibliographic information published by the Deutsche Nationalbibliothek

The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available in the Internet at <http://dnb.d-nb.de>.

License

This work is licensed under a Creative Commons Attribution 3.0 Unported license (CC-BY 3.0): <http://creativecommons.org/licenses/by/3.0/legalcode>.



In brief, this license authorizes each and everybody to share (to copy, distribute and transmit) the work under the following conditions, without impairing or restricting the authors' moral rights:

- Attribution: The work must be attributed to its authors.

The copyright is retained by the corresponding authors.

Digital Object Identifier: 10.4230/LIPIcs.STACS.2017.0

ISBN 978-3-95977-028-6

ISSN 1868-8969

<http://www.dagstuhl.de/lipics>

LIPICs – Leibniz International Proceedings in Informatics

LIPICs is a series of high-quality conference proceedings across all fields in informatics. LIPICs volumes are published according to the principle of Open Access, i.e., they are available online and free of charge.

Editorial Board

- Susanne Albers (TU München)
- Chris Hankin (Imperial College London)
- Deepak Kapur (University of New Mexico)
- Michael Mitzenmacher (Harvard University)
- Madhavan Mukund (Chennai Mathematical Institute)
- Catuscia Palamidessi (INRIA)
- Wolfgang Thomas (*Chair*, RWTH Aachen)
- Pascal Weil (CNRS and University Bordeaux)
- Reinhard Wilhelm (Saarland University)

ISSN 1868-8969

<http://www.dagstuhl.de/lipics>

■ Contents

Foreword	
<i>Heribert Vollmer and Brigitte Vallée</i>	0:ix

Tutorial

Computational Aspects of Logics in Team Semantics	
<i>Juha Kontinen</i>	1:1–1:1

Invited Talks

Recompression: New Approach to Word Equations and Context Unification	
<i>Artur Jeż</i>	2:1–2:3
Discrete Logarithms in Small Characteristic Finite Fields: a Survey of Recent Advances	
<i>Antoine Joux</i>	3:1–3:1
Applications of Algorithmic Metatheorems to Space Complexity and Parallelism	
<i>Till Tantau</i>	4:1–4:4

Regular Contributions

Split Contraction: The Untold Story	
<i>Akanksha Agrawal, Daniel Lokshtanov, Saket Saurabh, and Meirav Zehavi</i>	5:1–5:14
The Operator Approach to Entropy Games	
<i>Marianne Akian, Stéphane Gaubert, Julien Grand-Clément, and Jérémie Guillaud</i>	6:1–6:14
Parameterized Complexity of Small Weight Automorphisms	
<i>Vikraman Arvind, Johannes Köbler, Sebastian Kuhnert, and Jacobo Torán</i>	7:1–7:13
What Can Be Verified Locally?	
<i>Alkida Balliu, Gianlorenzo D’Angelo, Pierre Fraigniaud, and Dennis Olivetti</i>	8:1–8:13
Improved Time-Space Trade-Offs for Computing Voronoi Diagrams	
<i>Bahareh Banyassady, Matias Korman, Wolfgang Mulzer, André van Renssen, Marcel Roeloffzen, Paul Seiferth, and Yannik Stein</i>	9:1–9:14
Energy-Efficient Delivery by Heterogeneous Mobile Agents	
<i>Andreas Bärtschi, Jérémie Chalopin, Shantanu Das, Yann Disser, Daniel Graf, Jan Hackfeld, and Paolo Penna</i>	10:1–10:14
Towards Tighter Space Bounds for Counting Triangles and Other Substructures in Graph Streams	
<i>Suman K. Bera and Amit Chakrabarti</i>	11:1–11:14
On Polynomial Approximations Over $\mathbb{Z}/2^k\mathbb{Z}$	
<i>Abhishek Bhrushundi, Prahladh Harsha, and Srikanth Srinivasan</i>	12:1–12:12



$\exists\mathbb{R}$ -Complete Decision Problems about Symmetric Nash Equilibria in Symmetric Multi-Player Games <i>Vittorio Bilò and Marios Mavronicolas</i>	13:1–13:14
On Büchi One-Counter Automata <i>Stanislav Böhm, Stefan Göller, Simon Halfon, and Piotr Hofman</i>	14:1–14:13
Optimizing Tree Decompositions in MSO <i>Mikołaj Bojańczyk and Michał Pilipczuk</i>	15:1–15:13
Complexity of Token Swapping and its Variants <i>Édouard Bonnet, Tillmann Miltzow, and Paweł Rzążewski</i>	16:1–16:14
Monte Carlo Computability <i>Vasco Brattka, Rupert Hözl, and Rutger Kuyper</i>	17:1–17:14
The Parameterized Complexity of Finding a 2-Sphere in a Simplicial Complex <i>Benjamin Burton, Sergio Cabello, Stefan Kratsch, and William Pettersson</i>	18:1–18:14
On Long Words Avoiding Zimin Patterns <i>Arnaud Carayol and Stefan Göller</i>	19:1–19:13
Extended Learning Graphs for Triangle Finding <i>Titouan Carette, Mathieu Laurière, and Frédéric Magniez</i>	20:1–20:14
Lower Bounds for Elimination via Weak Regularity <i>Arkadev Chattopadhyay, Pavel Dvořák, Michal Koucký, Bruno Loff, and Sagnik Mukhopadhyay</i>	21:1–21:14
Parameterized and Approximation Results for Scheduling with a Low Rank Processing Time Matrix <i>Lin Chen, Dániel Marx, Deshi Ye, and Guochuan Zhang</i>	22:1–22:14
Fractional Coverings, Greedy Coverings, and Rectifier Networks <i>Dmitry Chistikov, Szabolcs Iván, Anna Lubiw, and Jeffrey Shallit</i>	23:1–23:14
Separability of Reachability Sets of Vector Addition Systems <i>Lorenzo Clemente, Wojciech Czerwiński, Sławomir Lasota, and Charles Paperman</i>	24:1–24:14
Counting Edge-Injective Homomorphisms and Matchings on Restricted Graph Classes <i>Radu Curticapean, Holger Dell, and Marc Roth</i>	25:1–25:15
Robust and Adaptive Search <i>Yann Disser and Stefan Kratsch</i>	26:1–26:14
Graphic TSP in Cubic Graphs <i>Zdeněk Dvořák, Daniel Král', and Bojan Mohar</i>	27:1–27:13
Independent Sets near the Lower Bound in Bounded Degree Graphs <i>Zdeněk Dvořák and Bernard Lidický</i>	28:1–28:13
Semialgebraic Invariant Synthesis for the Kannan-Lipton Orbit Problem <i>Nathanaël Fijalkow, Pierre Ohlmann, Joël Ouaknine, Amaury Pouly, and James Worrell</i>	29:1–29:13

The First-Order Logic of Hyperproperties <i>Bernd Finkbeiner and Martin Zimmermann</i>	30:1–30:14
Improving and Extending the Testing of Distributions for Shape-Restricted Properties <i>Eldar Fischer, Oded Lachish, and Yadu Vasudev</i>	31:1–31:14
Matrix Rigidity from the Viewpoint of Parameterized Complexity <i>Fedor V. Fomin, Daniel Lokshantov, S. M. Meesum, Saket Saurabh, and Meirav Zehavi</i>	32:1–32:14
Deterministic Regular Expressions with Back-References <i>Dominik D. Freydenberger and Markus L. Schmid</i>	33:1–33:14
On the Decomposition of Finite-Valued Streaming String Transducers <i>Paul Gallot, Anca Muscholl, Gabriele Puppis, and Sylvain Salvati</i>	34:1–34:14
Circuit Evaluation for Finite Semirings <i>Moses Ganardi, Danny Hucke, Daniel König, and Markus Lohrey</i>	35:1–35:14
Combining Treewidth and Backdoors for CSP <i>Robert Ganian, M. S. Ramanujan, and Stefan Szeider</i>	36:1–36:17
On the Complexity of Partial Derivatives <i>Ignacio Garcia-Marco, Pascal Koiran, Timothée Pecatte, and Stéphan Thomassé</i> .	37:1–37:13
Set Membership with Non-Adaptive Bit Probes <i>Mohit Garg and Jaikumar Radhakrishnan</i>	38:1–38:13
Pro-Aperiodic Monoids via Saturated Models <i>Samuel J. v. Gool and Benjamin Steinberg</i>	39:1–39:14
Trimming and Gluing Gray Codes <i>Petr Gregor and Torsten Mütze</i>	40:1–40:14
Mixing of Permutations by Biased Transposition <i>Shahrad Haddadan and Peter Winkler</i>	41:1–41:13
Efficient Quantum Walk on the Grid with Multiple Marked Elements <i>Peter Høyer and Mojtaba Komeili</i>	42:1–42:14
On OBDD-Based Algorithms and Proof Systems That Dynamically Change Order of Variables <i>Dmitry Itsykson, Alexander Knop, Andrey Romashchenko, and Dmitry Sokolov</i> ...	43:1–43:14
Multiple Random Walks on Paths and Grids <i>Andrej Ivašković, Adrian Kosowski, Dominik Pajak, and Thomas Sauerwald</i>	44:1–44:14
On the Size of Lempel-Ziv and Lyndon Factorizations <i>Juha Kärkkäinen, Dominik Kempa, Yuto Nakashima, Simon J. Puglisi, and Arseny M. Shur</i>	45:1–45:13
Voting and Bribing in Single-Exponential Time <i>Dušan Knop, Martin Kouřtecký, and Matthias Mnich</i>	46:1–46:14
A Complexity Dichotomy for Poset Constraint Satisfaction <i>Michael Kompatscher and Trung Van Pham</i>	47:1–47:12

Structural Properties and Constant Factor-Approximation of Strong Distance- r Dominating Sets in Sparse Directed Graphs <i>Stephan Kreuzer, Roman Rabinovich, Sebastian Siebertz, and Grischa Weberstädt</i>	48:1–48:15
Computing Majority by Constant Depth Majority Circuits with Low Fan-in Gates <i>Alexander S. Kulikov and Vladimir V. Podolskii</i>	49:1–49:14
Minkowski Games <i>Stéphane Le Roux, Arno Pauly, and Jean-François Raskin</i>	50:1–50:13
On the Sensitivity Complexity of k -Uniform Hypergraph Properties <i>Qian Li and Xiaoming Sun</i>	51:1–51:12
The Complexity of Knapsack in Graph Groups <i>Markus Lohrey and Georg Zetsche</i>	52:1–52:14
Algorithmic Information, Plane Kakeya Sets, and Conditional Dimension <i>Jack H. Lutz and Neil Lutz</i>	53:1–53:13
On the Synchronisation Problem over Cellular Automata <i>Gaétan Richard</i>	54:1–54:13
Word Equations Where a Power Equals a Product of Powers <i>Aleksi Saarela</i>	55:1–55:9
Improved Distance Queries and Cycle Counting by Frobenius Normal Form <i>Piotr Sankowski and Karol Węgrzycki</i>	56:1–56:14
Lower Bounds on Key Derivation for Square-Friendly Applications <i>Maciej Skorski</i>	57:1–57:12
List Approximation for Increasing Kolmogorov Complexity <i>Marius Zimand</i>	58:1–58:12

■ Foreword

The Symposium on Theoretical Aspects of Computer Science conference series is an international forum for original research on theoretical computer science. Typical areas are:

- algorithms and data structures, including: design of parallel, distributed, approximation, and randomized algorithms; analysis of algorithms and combinatorics of data structures; computational geometry, cryptography, algorithmic learning theory, algorithmic game theory;
- automata and formal languages, including: algebraic and categorical methods, coding theory;
- complexity and computability, including: computational and structural complexity theory, parameterized complexity, randomness in computation;
- logic in computer science, including: finite model theory, database theory, semantics, specification and verification, rewriting and deduction;
- current challenges, for example: natural computing, quantum computing, mobile and net computing.

STACS is held alternately in France and in Germany. This year's conference (taking place March 8–11 in Hannover) is the 34th in the series. Previous meetings took place in Paris (1984), Saarbrücken (1985), Orsay (1986), Passau (1987), Bordeaux (1988), Paderborn (1989), Rouen (1990), Hamburg (1991), Cachan (1992), Würzburg (1993), Caen (1994), München (1995), Grenoble (1996), Lübeck (1997), Paris (1998), Trier (1999), Lille (2000), Dresden (2001), Antibes (2002), Berlin (2003), Montpellier (2004), Stuttgart (2005), Marseille (2006), Aachen (2007), Bordeaux (2008), Freiburg (2009), Nancy (2010), Dortmund (2011), Paris (2012), Kiel (2013), Lyon (2014), München (2015), and Orléans (2016).

The interest in STACS has remained at a high level over the past years. The STACS 2017 call for papers led to 212 submissions with authors from 38 countries. Each paper was assigned to three program committee members who, at their discretion, asked external reviewers for reports. The committee selected 54 papers during a three-week electronic meeting held in November/December. For the third time within the STACS conference series, there was also a rebuttal period during which authors could submit remarks to the PC concerning the reviews of their papers. As co-chairs of the program committee, we would like to sincerely thank all its members and the many external referees for their valuable work. The overall very high quality of the submissions made the selection a difficult task, and there were intense and interesting discussions inside the program committee.

This year, the conference includes a tutorial. We would like to express our thanks to the speaker Juha Kontinen for this tutorial, as well as to the invited speakers, Artur Jež, Antoine Joux, and Till Tantau. Special thanks go to the local organizing committee for continuous help throughout the conference organization.

Moreover, we thank Marc Herbstritt from the Dagstuhl/LIPICs team for assisting us in the publication process and the final production of the proceedings. These proceedings contain extended abstracts of the accepted contributions and abstracts of the invited talks and the tutorial. The authors retain their rights and make their work available under a Creative Commons license. The proceedings are published electronically by Schloss Dagstuhl – Leibniz-Center for Informatics within their LIPICs series.

STACS 2017 has received funds and help from the Deutsche Forschungsgemeinschaft (DFG), for which we are very grateful.

Hannover and Caen, March 2017

Heribert Vollmer and Brigitte Vallée

34th Symposium on Theoretical Aspects of Computer Science (STACS 2017).
Editors: Heribert Vollmer and Brigitte Vallée



Leibniz International Proceedings in Informatics

Schloss Dagstuhl – Leibniz-Zentrum für Informatik, Dagstuhl Publishing, Germany



SYMPOSIUM
ON THEORETICAL
ASPECTS
OF COMPUTER
SCIENCE

■ Conference Organization

Program Committee

Olaf Beyedrsdorff	University of Leeds
Francine Blanchet-Sadri	University of North Carolina
Beate Bollig	Technische Universität Dortmund
Nicolas Bonichon	Université Bordeaux 1
Jean Cardinal	Université Libre de Bruxelles
Nicolò Cesa-Bianchi	Università degli Studi di Milano
Léo Ducas	Centrum Wiskunde en Informatica
Arnaud Durand	Université Denis Diderot - Paris 7
Michael Elberfeld	RWTH Aachen
Pinar Heggernes	Universitetet i Bergen
Martin Hoefler	Goethe-Universität Frankfurt am Main
Giuseppe Italiano	Università degli Studi di Roma "Tor Vergata"
Emmanuel Jeandel	Université de Lorraine
Christian Komusiewicz	Friedrich-Schiller-Universität Jena
Nutan Limaye	Indian Institute of Technology, Bombay
Florin Manea	Christian-Albrechts-Universität zu Kiel
Filip Murlak	Uniwersytet Warszawski
Seth Pettie	University of Michigan
Irena Rusu	Université de Nantes
Sylvain Schmitz	Université Paris-Saclay
Frank Stephan	National University of Singapore
Brigitte Vallée	Université de Caen (co-chair)
Heribert Vollmer	Leibniz Universität Hannover (co-chair)
Ronald de Wolf	Centrum Wiskunde en Informatica
Florian Zuleger	Technische Universität Wien



Local Organization Committee

Maurice Chandoo

Anselm Haak

Martin Lück

Arne Meier (chair)

Anca Vais

Heribert Vollmer

External Reviewers

Amir Abboud	Marco Bressan	Jing Deng
Fariad Abu Zaid	Dan Browne	William E. Devanny
Ali Akhavi	Véronique Bruyère	Olivier Devillers
Eric Allender	Niv Buchbinder	Ajit Diwan
Joshua Alman	Kevin Buchin	Amina Doumane
Andris Ambainis	Binh-Minh Bui-Xuan	Stefan Droste
Benjamin Aminof	Laurent Bulteau	Philippe Duchon
Alex Andoni	Jaroslav Byrka	Christoph Dürr
Patrizio Angelini	Pavel Čadek	Matteo Dusefante
Srinivasan Arunachalam	Michaël Cadilhac	Zdenek Dvorak
Vikraman Arvind	Cristian S. Calude	Martin Dyer
Eugene Asarin	Florent Capelli	Marcin Dziubiński
Yossi Azar	Katarina Cechlarova	Charilaos Efthymiou
Nicolas Bacquey	Sourav Chakraborty	Thorsten Ehlers
Nikhil Balaji	Maurice Chandoo	Kord Eickmeyer
Eric Balkanski	Chandra Chekuri	Khaled Elbassioni
Grey Ballard	Jiehua Chen	Tapio Elomaa
Sayan Bandyopadhyay	Ruiwen Chen	Leah Epstein
Aritra Banik	Alexey Chernov	Marco Faella
Leonid Barenboim	Ho Yee Cheung	Piotr Faliszewski
David Mix Barrington	Dmitry Chistikov	Angelo Fanelli
Nicolas Basset	Rajesh Chitnis	Lene Favrholdt
Cristina Bazgan	Ferdinando Cicalese	Serge Fehr
Michael Bekos	Lorenzo Clemente	Stefan Felsner
Rémy Belmonte	Julien Clément	Henning Fernau
Aleksandrs Belovs	David Cohen	Guillaume Fertin
Huxley Bennett	Michael Cohen	Hendrik Fichtenberger
Cédric Bentz	Michelle Cordier	Nathanaël Fijalkow
Christoph Berkholz	Pierluigi Crescenzi	Till Fluschnik
Dietmar Berwanger	Christophe Crespelle	Fedor Fomin
René Van Bevern	Ágnes Cseh	Hervé Fournier
Bhaswar Bhattacharya	James Currie	Nathanaël François
Abhishek Bhowmick	Marek Cygan	Dominik D. Freydenberger
Stella Biderman	Wojciech Czerwiński	Takuro Fukunaga
Marcin Bienkowski	Zhu Daming	Radoslav Fulek
Ahmad Biniiaz	Luc Dartois	Hortensia Galeana-Sanchez
Markus Bläser	Bireswar Das	Pierre Ganty
Dakota Blair	Samir Datta	Jugal Garg
Joshua Blinkhorn	Laure Daviaud	Leszek Gasieniec
Hans L. Bodlaender	Claire David	Serge Gaspers
Martin Böhm	Adam Day	Pawel Gawrychowski
Benedikt Bollig	Joel Day	Sutanu Gayen
Ilario Bonacina	Jean-Lou De Carufel	Loukas Georgiadis
Ralph Bottesche	Mateus De Oliveira Oliveira	Dan Ghica
Joan Boyar	Martin Delacourt	Archontia Giannopoulou
Andreas Brandstädt	Argyrios Deligkas	Vasilis Gkatzelis
Vladimir Braverman	Holger Dell	Amy Glen

Marc Glisse	Juhani Karhumaki	Florent Madelaine
Tomasz Gogacz	Jarkko Kari	Frederic Maffray
Kira Goldner	Elham Kashefi	Frederic Magniez
Isaac B. Goldstein	Jens Katelaan	Meena Mahajan
Petr Golovach	Telikepalli Kavitha	Andreas Maletti
Themistoklis Gouleakis	Neeraj Kayal	Sebastian Maneth
Fabrizio Grandoni	Thomas Kesselheim	David Manlove
Noam Greenberg	Sandra Kiefer	Weizhen Mao
Sander Gribling	Yusuke Kobayashi	Irène Marcovici
Radu Grigore	Bojana Kodric	Jean-Yves Marion
Serge Grigorieff	Pascal Koiran	Nicolas Markey
Martin Groß	Pavel Kolev	Euripides Markou
Jiong Guo	Igor Konnov	Barnaby Martin
Anselm Haak	Juha Kontinen	Dániel Marx
Peter Habermehl	Wouter M. Koolen	Claire Mathieu
Michel Habib	Eryk Kopczynski	Elvira Mayordomo
Serge Haddad	Guy Kortsarz	Ernst W. Mayr
Simon Halfon	Dmitry Kosolobov	Andrew McGregor
Michael Hanus	Michal Koucky	Pierre Mckenzie
Sariel Har-Peled	Marcin Kozik	Ian McQuillan
Prahladh Harsha	Jan Kratochvil	Moti Medina
Hamed Hatami	Stefan Kratsch	Kitty Meeks
Meng He	Matthias Krause	Klaus Meer
Lauri Hella	Sebastian Krinninger	Arne Meier
Miki Hermann	Amer Krivosija	Or Meir
Danny Hermelin	Alexander Kulikov	Stefan Mengel
Claudio Hermida	Raghav Kulkarni	Robert Mercas
Luke Hinde	Neeraj Kumar	George Mertzios
Udo Hoffmann	Nirman Kumar	David Mezlaf
Mathieu Hoyrup	Anthony Labarre	Mehdi Mhalla
Daniel Hsu	Arnaud Labourel	Pierre Michaud
Chien-Chung Huang	Guillaume Lagarde	Tillmann Miltzow
Danny Hucke	Victor Lagerqvist	Neeldhara Misra
Hsien-Kuei Hwang	Harry Lang	Victor Mitrană
Rasmus Ibsen-Jensen	Jérôme Lang	Rajat Mittal
David Ilcinkas	Sophie Laplante	Shuichi Miyazaki
Kazuo Iwama	Silvio Lattanzi	Matthias Mnich
Rahul Jain	Massimo Lauria	Tobias Mömke
Damien Jamet	Marijana Lazic	Hendrik Molter
Bart M. P. Jansen	Francois Le Gall	Raffaele Mosca
Klaus Jansen	Stephane Le Roux	Amer Mouawad
Jesper Jansson	Mathieu Liedloff	Haiko Müller
Maximilian Jaroschek	Zhixin Liu	Partha Mukhopadhyay
Mark Jerrum	Christof Löding	Ian Munro
Peter Jonsson	Andrew Lohr	Alexander Munteanu
Hossein Jowhari	Markus Lohrey	Andrzej Murawski
Stasys Jukna	Veronika Loitzenbauer	Paresh Nakhe
Naonori Kakimura	Satyanarayana Lokam	Meghana Nasre
Lior Kamma	Daniel Lokshtanov	Jesper Nederlof
Mamadou Moustapha Kanté	Zvi Lotker	Daniel Neider
Michael Kapralov	Martin Lück	Cyril Nicaud
Frantisek Kardos	Robert Lukotka	André Nichterlein

Andre Nies	Wojciech Rytter	Jim Tao
Nicolas Nisse	Ville Salo	Sébastien Tavenas
Dirk Nowotka	Fernando Sanchez Villaamil	Raghunath Tewari
Jerri Nummenpalo	Arnaud Sangnier	Johan Thapper
Sebastian Ordyniak	Swagato Sanyal	Guillaume Theyssier
Sigal Oren	Jayalal Sarma	Thomas Thierauf
Patrice Ossona de Mendez	Srinivasa Rao Satti	Sumedh Tirodkar
Maris Ozols	Martin Sauerhoff	Luca Trevisan
Rasmus Pagh	Nitin Saurabh	Madhur Tulsiani
Dominik Pajak	Saket Saurabh	Jerzy Tyszkiewicz
Greta Pangborn	Guillaume Scerri	Alexander Ushakov
Thomas Pani	John Schanck	Przemysław Uznański
Fahad Panolan	Bruno Scherrer	Vincent Vajnovszki
Charis Papadopoulos	Kevin Schewior	Pierre Valarcher
Charles Paperman	Markus L. Schmid	Joran van Apeldoorn
Nikos Parotsidis	Henning Schnoor	Joris van der Hoeven
Aline Parreau	Uwe Schöning	Erik Jan van Leeuwen
Ludovic Patey	Pascal Schweitzer	André van Renssen
Christophe Paul	Chris Schwiegelshohn	Rob van Stee
Daniel Paulusma	Stefan Schwoon	Anke van Zuylen
Arno Pauly	Olivier Serre	Vinodchandran Variyam
A Pavan	Hadas Shachnai	Sergei Vassilvitskii
Romain Pechoux	Rudrapatna Shyamasundar	Yadu Vasudev
Pan Peng	Aaron Sidford	Daniel Vaz
Richard Peng	Sebastian Siebertz	Sander Verdonschot
Sylvain Perifel	Rodrigo Silveira	Nikolay Vereshchagin
Will Perkins	Sean Simmons	Sergey Verlan
Daniela Petrisan	Moritz Sinn	Stéphane Vialette
Ramchandra Phawade	Johan Sivertsen	Ben Lee Volk
Geevarghese Philip	Alexander Skopalik	Pooja Vyavahare
Marcin Pilipczuk	Michał Skrzypczak	Jan Philipp Wächter
Michał Pilipczuk	Michiel Smid	Magnus Wahlström
Sophie Pinchinat	Kian Wee Soh	Michael Walter
Thomas Place	Manuel Sorge	Andreas Weiermann
Vladimir Podolskii	Joachim Spoerhase	Oren Weimann
Danny Bøgsted Poulsen	Srikanth Srinivasan	S. Matthew Weinberg
Tobias Pröger	Konstantinos Stavropoulos	Georg Weissenbacher
Kirk Pruhs	Benjamin Steinberg	Matthias Westermann
Ivan Radicek	Brett Stevens	Andreas Winter
Narad Rampersad	Irina Stoilkovska	Carsten Witt
Raghavendra Rao B V	Darren Strash	Maximilian Wötzel
Michael Rao	Howard Straubing	Marcin Wrochna
Ilya Razenshteyn	Yann Strozecki	Christian Wulff-Nilsen
Daniel Reidenbach	Hsin-Hao Su	Junjie Ye
Anja Rey	Ondrej Suchy	Yu Yu
Leonid Reyzin	He Sun	Jean-Baptiste Yunès
Colin Riba	Jukka Suomela	Marc Zeitoun
Dana Richards	Subash Suri	Georg Zetsche
Jérémie Roland	Nimrod Talmon	Thomas Zeume
Andrei Romashchenko	Till Tantau	Chihao Zhang

