

Theorietag 2024

Workshop on Algorithms, Complexity and Logic

The talks will be held in the lecture halls **6C (Thursday)** and **6A (Friday)** in building 26.11.

Program

Below you will find the program for the 86. Theorietag. Please be advised that the program is preliminary and subject to change.

Thursday, 18 April 2024:

12.30-13.00

Welcome: Snacks & Coffee

13.00-14.15 Session Chair: Jörg Rothe

Fixpoints in Modal Logic: Finite Convergence and Higher Order
Florian Bruse, Martin Lange, Etienne Lozes, Marco Sälzer

FPT-Approximations for k-Min-Sum-Radii Clustering
Lena Carta, Lukas Drexler, **Annika Hennes**, Clemens Rösner, Melanie Schmidt

Space Lower Bounds for Dynamic Filters
William Kuszmaul, **Stefan Walzer**

14.45-16.00 Session Chair: Paul Nüsken

Visual Cryptography in 2D
Sneha Mohanty, Tobias Grugel, Henrik Leisdon, Benjamin Robens, Maximilian Leisegang, Christian Schindelhauer

Eliminating Majority Illusion
Foivos Fioravantes, **Abhiruk Lahiri**, Antonio Lauerbach, Marie Diana Sieper, Samuel Wolf

Apportionment with Thresholds: Strategic Campaigns are Easy in the Top-Choice but Hard in the Second-Chance Mode
Christian Laußmann, Jörg Rothe, **Tessa Seeger**

16:20-17:10 Session Chair: Melanie Schmidt

Push-Pull Sum Protocol for Randomized Rumor Spreading
Saptadi Nugroho, Alexander Weinmann, Christian Schindelhauer

Toward Completing the Picture of Control in Schulze and Ranked Pairs Elections
Cynthia Maushagen, David Niclaus, **Paul Nüsken**, Jörg Rothe, Tessa Seeger

17.20-18.10 Session Chair: Jérôme Lang

Complexity of Control of Selected Multiwinner Elections
Garó Karh Bet, Jörg Rothe, Roman Zorn

NP-Hard Problems Are Not in BQP
Reiner Czerwinski

19.30: Dinner

Scotti's
Christophstraße 2
40225 Düsseldorf

Friday, 19 April 2024

8.30-9.00

Coffee & Snacks

9.00-10.00 Invited Talk, Session Chair: Jörg Rothe

From Theoretical Computer Science to Computational Social Choice
Jérôme Lang [CNRS and Université Paris Dauphine PSL]

10.30-11.45 Session Chair: Tessa Seeger

Arithmetic Circuits over Natural Numbers with Division
Silas Cato Sacher

Polynomial Calculus in QBF: Circuit Characterisation and Lower Bounds
Kaspar Kasche, Olaf Beyersdorff, Luc Spachmann

Prophet Inequalities over Time
Andreas Abels

12.00-12:55 Session Chair: Joanna Kaczmarek

Optima Localization for Scheduling Problems: Computer-Aided Approach
Ilya Chernykh

The Transfer Space - A Biochemical Bottom-Up Approach to Cooperative Game Theory

Thomas Friedrich, Joanne Newman, Wilhelm Köpper

13.00-Open End Lunch