

# Annual IEEE Symposium on Foundations of Computer Science 2024

Matej Belšak<sup>2\*</sup>, Nik Čadež<sup>2</sup>, Klemen Kavčič<sup>2</sup>, Tomaž Leonardis<sup>1</sup>,  
Bor Pangeršič<sup>1</sup>, Marko Rozman<sup>2</sup>, Pia Sotlar<sup>2</sup>, Vanja Stojanović<sup>1</sup>

<sup>1</sup>Faculty of Mathematics and Physics, University of Ljubljana

<sup>2</sup>Faculty of Computer and Information Science, University of Ljubljana

## Abstract

*We will write this at the end*

## Introduction

The FOCS conference or IEEE Annual Symposium on Foundations of Computer Science is an academic conference that covers a broad range of theoretical computer science. It is sponsored by the IEEE Computer Science Technical Committee on the Mathematical Foundations of Computing (TCMF).

The FOCS 2024 took place in Chicago - Voco Chicago Downtown, from October 27-30, 2024. It covered a variety of topics, for submissions the following were mentioned:

- Communication complexity
- Circuit complexity
- Average-case algorithms and complexity
- High-dimensional algorithms
- Online algorithms
- Parametrized algorithms
- Spectral methods
- Streaming algorithms
- Randomized algorithms
- Cryptography
- Computational complexity
- Algorithms and data structures
- Quantum computing
- Foundations of machine learning
- Algorithmic coding theory
- Sublinear algorithms
- Algorithmic graph theory
- Continuous optimization
- Foundations of fairness, privacy and databases
- Pseudorandomness and derandomization
- Markov chains
- Analysis of Boolean functions
- Economics and computation
- Combinatorial optimization
- Algebraic computation
- Approximation algorithms

- Parallel and distributed algorithms
- Computational learning theory
- Computational geometry
- Algorithmic game theory
- Combinatorics

The official welcome message of FOCS 2024 states that nearly 500 papers were submitted, but does not specify the exact number, out of which 133 were accepted and 131 were presented as lectures during the event.

In the following three sections we present three curated papers from the conference... (dopisemo na koncu ko vemo katere)

## Paper 1

Hi, I'm paper 1!

## Paper 2

Hi, I'm paper 2!

## Paper 3

Hi, I'm paper 3!

\*Corresponding author: mb4390@student.uni-lj.si  
Ljubljana, February 2025