



Summer School in Mathematics

June 23–27, 2025



Eötvös Loránd University (ELTE), Budapest, Hungary
in cooperation with the

HUN-REN Alfréd Rényi Institute of Mathematics (RI), Budapest, Hungary

ALGORITHMS

Lectures:

- Erika Bérczi-Kovács (ELTE): *Optimization in communication networks*
- Katalin Friedl (BME): *Introduction to quantum algorithms*
- András Gilyén (RI): *Quantum acceleration through linear algebra and Markov chains*
- Katalin Gyarmati (ELTE): *Public key cryptosystems*
- Gábor Ivanyos (SZTAKI-BME): *Computing the non-commutative rank of a matrix space*
- Zoltán Király (ELTE): *Online and parallel algorithms*
- Tamás Kis (SZTAKI-ELTE): *Randomized algorithms*
- Péter Kutas (ELTE): *Lattice reduction and its application to cryptography*
- Dömötör Pálvölgyi (ELTE): *Complexity breakthrough: simulating T time with $\tilde{O}(\sqrt{T})$ space*
- László Pyber (RI): *Babai's fast algorithm for the graph isomorphism problem*

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<http://www.math.elte.hu/summeschool>



Early registration deadline: May 15, 2025

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