

ALGORITHMS

SUMMER SCHOOL IN MATHEMATICS, BUDAPEST, JUNE 23–27, 2025

	Monday, June 23	Tuesday, June 24	Wednesday, June 25	Thursday, June 26	Friday, June 27
9.00 – 10.30	Erika Bérczi-Kovács (ELTE): <i>Optimization in communication networks</i>	Katalin Gyarmati (ELTE): <i>Public key cryptosystems (1)</i>	Tamás Kis (SZTAKI-ELTE): <i>Randomized algorithms (1)</i>	Katalin Gyarmati (ELTE): <i>Public key cryptosystems (2)</i>	Péter Kutas (ELTE): <i>Lattice reduction and its application to cryptography (2)</i>
10.30 – 11.00	C O F F E E / R E F R E S H M E N T				
11.00 – 12.30	Zoltán Király (ELTE): <i>Online and parallel algorithms (1)</i>	Zoltán Király (ELTE): <i>Online and parallel algorithms (2)</i>	Katalin Friedl (BME): <i>Introduction to quantum algorithms (2)</i>	Péter Kutas (ELTE): <i>Lattice reduction and its application to cryptography (1)</i>	Tamás Kis (SZTAKI-ELTE): <i>Randomized algorithms (2)</i>
12.30 -- 14.00	L U N C H				
14.00 -- 15.30	Katalin Friedl (BME): <i>Introduction to quantum algorithms (1)</i>	Dömötör Pálvölgyi (ELTE): <i>Complexity breakthrough: simulating T time with $\tilde{O}(\sqrt{T})$ space</i>	CAVE TOUR (PÁLVÖLGYI CAVE)	László Pyber (RI): <i>Babai's fast algorithm for the graph isomorphism problem</i>	Gábor Ivanyos (SZTAKI-BME): <i>Computing the non-commutative rank of a matrix space</i>
15.30 -- 16.00					
16.00 – 17.30	WELCOME PARTY	BIKE TOUR		András Gilyén (RI): <i>Quantum acceleration through linear algebra and Markov chains (online lecture)</i>	
17.30 -- 19.00					