KT: Keynote Talk; CT: Contributed Talk, CTO: Contributed Talk Online.

Thursday, 20th of July

09:00–09:30		Registration	
09:30–09:40		Workshop Opening	
Quantum chemistry applications			*Chair: Stefano Pozza*
09:40–10:25	KT	**Christian Bonhomme** Sorbonne Université	*-Product and *-Inverse in Nuclear Magnetic Resonance
10:25–10:50	CT	**Lorenzo Lazzarino** Univerzita Karlova	Numerical Approximation of the Time-Ordered Exponential for Spin Dynamic Simulation
10:50–11:15		Coffee Break	
Graph theory, umbral calculus and differential equations			*Chair: Christian Bonhomme*
11:15–11:40	CT	**Manon Ryckebush** Université du Littoral Côte d'Opale	Between graph theory and differential equations: the $\star$-product
11:40–12:25	KT	**Pierre-Louis Giscard** Université du Littoral Côte d'Opale	Why $1/(1-x)$ is all we need: an umbral calculus on distributions
12:25–14:30		Lunch Break	
Contributed Talks			*Chair: Iveta Hnětynková*
14:30–14:55	CT	**Davide Palitta** Università di Bologna	On the convergence of low-rank Krylov methods
14:55–15:20	CT	**Eda Oktay** Univerzita Karlova	Preconditioning of GMRES-Based Iterative Refinement for Weighted Least-Squares Problems
15:20–15:45	CT	**Marc Fehling** Colorado State University	TBA
15:45–16:10	CTO	**Sandip Maji** Indian Institute of Technology Guwahati	Nonsymmetric interior penalty Galerkin method for nonlinear time-fractional integro-partial differential equations
16:10		Discussion and coffee	

Friday, 21st of July

Numerical methods for ODEs			*Chair: Pierre-Louis Giscard*
09:30–09:40		Introduction	
9:40-10:05	CT	**Niel Van Buggenhout** Univerzita Karlova	Numerical ODE solver based on the $\star$-product
10:05-10:30	CT	**Stefano Pozza** Univerzita Karlova	An $O(N)$ numerical method for computing the solution operator of the generalized N-size Rosen-Zener model
10:30-10:55	CT	**Shazma Zahid** Univerzita Karlova	A new Legendre polynomial approach for computing the matrix exponential
10:55-11:20		Coffee Break	
Contributed Talks			*Chair: Niel Van Buggenhout*
11:20-11:45	CTO	**Nikolas Venkovic** NXP semiconductors	Deflation of linear systems sampled with Markov chains of random coefficient fields in stochastic elliptic partial differential equations
11:45-12:10	CTO	**Muhammad Shahid Ashraf** IBA Karachi	Expanding Parameter-Robust Numerical Methods for Singularly Perturbed PDEs: Beyond the Unit Square and into the Curved Domain
12:10-12:35	CTO	**Ritesh Khan** Indian Institute of Technology Madras	HODLRdD: A fast black-box algorithm for N-body problems in d dimensions
12:35		Conclusion	