

Approximation and geometry in high dimensions 09.10.2022 - 15.10.2022 Będlewo

Lecture Schedule

	Monday 10.10	Tuesday 11.10	Wednesday 12.10	Thursday 13.10	Friday 14.10	Saturday 15.10
8.00-9.00	Breakfast	Breakfast	Breakfast	Breakfast	Breakfast	Breakfast
9.15-10.15	Hermann König Extremal non-central sections of the simplex and the cube	Elisabeth Werner Spherical convex hull of random points on a wedge	David Krieg Function recovery in L2	Michael Gnewuch Function Recovery and Numerical Integration on Hermite Spaces of Functions of Infinitely Many Variables	Ingo Steinwart Aspects of reproducing kernel Hilbert spaces	
10.15-10.45	Lorenz Fruehwirth Sanov-type large deviations and conditional limit theorems for high-dimensional Orlicz balls	Julian Hofstadler Consistency of randomized integration methods	Ian Sloan High dimensional approximation and the curse of dimensionality	Robin Rüßmann Equivalence of L ² -Approximation, as well as Integration, on Gaussian Spaces and on Hermite Spaces	Tizian Wenzel Adaptively chosen sampling points: Analysis of target data dependent greedy kernel algorithms	
10.45-11.15	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break	
11.15-11.45	Florian Besau An intrinsic volume metric on the class of convex bodies	Robert J. Kunsch How much randomness is needed for high-confidence Monte Carlo integration?	Nicolas Nagel The Connection Between the Kadison-Singer Problem and Frame Theory	Dirk Nuyens Near-optimal randomised error for lattice rules with random number of points and deterministic generating vectors	Paweł Siedlecki Tractability of multivariate linear problems in the presence of noise - the worst case setting	
11.45-12.15	Thomas Jahn Coproximality of linear subspaces in generalized Minkowski spaces	Marcin Wnuk Which problems can be solved by randomized algorithms?	Martin Schäfer Constructive subsampling of finite frames and applications in function recovery	Peter Kritzer The fast reduced QMC matrix-vector product	Natalia Czyżewska On some properties of Euler scheme for DDEs and ODEs under nonstandard assumptions and noisy information	
12.15-12.45	Tomasz Beberok L ^p Markov exponent of certain UPC sets	Stefan Heinrich On the randomized complexity of parametric integration	Felix Bartel On the reconstruction of functions from values at subsampled quadrature points	Laura Lippert Transforming approximation algorithms from the d-torus to other domains		
12.45-14.15	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	
14.15-14.45	Mathias Sonleitner Random approximation of convex bodies in Hausdorff distance	Tomasz Bochacik On optimality, stability, and exceptional sets of some randomized algorithms for ODEs	Excursion	Dmitriy Bilyk Frames, designs, and discrete measures minimizing energy integrals		Time for discussion
14.45-15.15	Michael L. Juhos Limit theorems for mixed-norm sequence spaces with applications to volume distribution	Peter Mathé Randomization in inverse problems in Hilbert space		Jan Vybiral Schur's multiplication theorem and lower bounds for numerical integration		
15.15-15.45	Coffee Break	Coffee Break		Coffee Break		
15.45-16.15	Dominik Schmid Markov equivalence classes of directed acyclic graphs	Karin Schnass Average sparse approximation for signals with non-homogeneous support distribution		Poster Session		
16.15-16.45	Julia Kostin Convex Geometry Based Guarantees for Low-rank Matrix Recovery with Adversarial Noise	Kumar Harsha Infinite-Variate L ² -Approximation Based on General Linear Information using Multilevel Strategies				
18.30	Bonfire	Dinner	Special Dinner	Dinner	Dinner	