

Probabilistic Operator Algebra Seminar

Organizer: Dan Virgil Voiculescu

Monday, 9:00–10:30 am, to attend via Zoom email David Jekel (daj@math.ku.dk) remote

May 25 **Friedrich Goetze**, University of Bielefeld

Cramer-Wold bounds for Kantorovich and Zolotarev distances

Upper bounds for the Kantorovich and Zolotarev distances for probability measures on multidimensional Euclidean spaces are given in terms of similar distances between their one dimensional projections which are often easier accessible. This quantifies for instance the Cramer-Wold continuity theorem of weak convergence for probability measures. We derive bounds for the multivariate Kantorovich transport distance for as well as for the Zolotarev distances using Fourier analysis in Euclidean spaces. This is based on joint work with Sergey Bobkov in arXiv:2506.17745 and arXiv:2412.10276.