

Random cone-restricted operators

Prof. Dr. Martin Lotz
School of Mathematics,
University of Manchester
martin.lotz@manchester.ac.uk

Restrictions of linear maps to maps to convex cones appear naturally in conic optimization and its applications. The norms, restricted singular values, and condition numbers of such cone-restricted operators play a role in the complexity analysis of algorithms, and in the sensitivity analysis of convex data recovery and separation approaches. In this talk I will present some approaches to studying such quantities for random operators, based on Gaussian comparison inequalities and on classical integral geometry.