Probability

Khinchin's inequality with sharp constants \((p = 1, \ p > 3)\)

Missing factor in Hoeffding's concentration inequality for random signs: Joshua Siktar, 27th September

Expected supremum of a Gaussian vector

Pinsker's inequality

Salem-Zygmund central limit theorem

Littlewood-Offord problem

Geometry

Minkowski's theorem (for lattice points) Zichao, 13th Sep

Brunn-Minkowski inequality (inductive proof for boxes) Seth Cobb, 20th September

Busemann's theorem

Steiner symmetrisation, Blaschke-Sanatalo inequality Yihan Zhang, Oct 11

Mean width, Urysohn's inequality

Spherical codes

Hardness of volume approximation

Functional analysis

Schatten classes

Grothendieck's inequality Xinyu Wu, Oct 18

Johnson-Lindenstrauss lemma