Reading Seminar Fall 2018

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