Graduate Seminar

Sudan Xing
Memorial University

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1 - 2 pm in HH-3017

The general dual Orlicz-Minkowski problem

Abstract:

The classical Minkowski problem is a central problem in convex geometry which asks that given a nonzero finite Borel measure μ, what are the necessary and sufficient conditions on μ such that μ equals to the surface area measure of a convex body K.

In this talk, I will discuss the general dual extension of the classical Minkowski problem—the generalized dual Orlicz-Minkowski problem. That is, *for which nonzero finite Borel measures* μ *on* S^{n-1} *and continuous functions* G *and* ψ *do there exist* $\tau \in \mathbb{R}$ *and* $K \in \mathcal{K}_o^n$ *such that* $\mu = \tau \widetilde{C}_{G,\psi}(K,\cdot)$*?* Here $\widetilde{C}_{G,\psi}(K,\cdot)$ is a finite signed Borel measure. A solution of this problem will be presented.