

**Analysis and Applications:
A Conference in Honor of Elias M. Stein
Princeton University, Princeton, New Jersey
May 16-20, 2011**

Speaker: Sun-Yung Alice Chang (Princeton University)

Date/Time: Tuesday, May 17, 2011 / 3:30-4:30 pm

Talk Title: On Aleksandrov-Fenchel inequality for k -convex domains

Abstract:

In this talk, I will report some recent joint work with Yi Wang in which we apply method of mass transport to generalize the quermassintegral-inequality of Aleksandrov-Fenchel type from convex domains in \mathbb{R}^n to a class of k -convex domains, we will also discuss comparison of inequalities of these type to inequalities of symmetric functions of curvatures on Riemannian manifolds.