1147-35-407　　　　　　**Ovidiu Savin** and **Hui Yu*** (`huiyu@math.columbia.edu`). *Regularity of optimal transport between planar convex sets.*

In this talk we discuss a W2p estimate for the potential of optimal transport between two convex domains in the plane, which improves Caffarelli's C1alpha estimate. Some of the new ideas developed are an obliqueness result for rough convex domains and a growth control of the eccentricity of sections of solution to the Monge-Ampere equation. (Received January 22, 2019)