1142-35-156 **Zihui Zhao***, zhaozh@uw.edu, and **Steve Hofmann**, **José María Martell**, **Svitlana Mayboroda** and **Tatiana Toro**. *Elliptic measures and the geometry of domains.*

Given a bounded domain Ω, the harmonic measure ω is a probability measure on the boundary $\partial\Omega$ and it characterizes where a Brownian traveller in Ω is likely to exit the domain. The elliptic measure is a non-homogenous variant of harmonic measure. Since 1917, there has been much study about the relationship between the elliptic/harmonic measure ω and the boundary surface measure σ. In particular, are ω and σ absolutely continuous with each other? In this talk, I will show how a positive answer to this question implies that the corresponding domain enjoys good geometric property, thus we obtain a sufficient condition for the absolute continuity of ω and σ. (Received September 01, 2018)