1157-53-631 **Julian Chaidez*** (jchaidez@berkeley.edu). *Combinatorial Reeb Dynamics and Rotation Numbers.*

Many open problems in contact geometry center on quantitative properties of Reeb flows. For instance, the Viterbo conjecture proposes an isoperimetric inequality relating the minimal period of a closed Reeb orbit on the boundary of a convex domain in $\mathbb{C}^n$ to that domain's volume. One challenge to our understanding of these questions is a general lack of computationally tractable examples. In this talk, I will discuss an ongoing series of projects developing a theory of Reeb flows on certain triangulated spaces, and as a specific starting point, convex polytopes in $\mathbb{C}^2$. One can use some of this theory to write computer programs and probe quantitative questions about Reeb flows on convex domains by doing numerical experiments. I will present some of the interesting outcomes of these experiments. (Received February 04, 2020)