

Chenyang Xu: **Dual complex of singular pairs**

Abstract: We will discuss the recent progress of understanding the dual complex $D(D)$ of a singular pair (X,D) , which is the combinatorial data characterizing how the components of the divisor D intersect each other. In particular, we will focus on the recent joint work with Kollár on studying the fundamental group of $D(D)$ when (X,D) is a log Calabi-Yau pair. This also has direct application to the degeneration of Calabi-Yau manifolds.