

## **DISCRETENESS OF VOLUMES**

**Speaker:Chenyang Xu**  
**Princeton University**

**Time: Thu., Aug. 28th, 16:00-17:00PM**

**Venue:Gu Lecture Hall, SCMS**

### **Abstract:**

The concept of local volume of a klt singularity, which is the infimum of normalized volumes of all valuations centered at the singularity, plays a central role in the local stability theory. The Stable Degeneration Theorem says any klt singularity admits a volume preserved degeneration to a K-semistable log Fano cone singularity. In this talk, I will show that all K-semistable log Fano cone singularities with volume bounded from below are bounded. As a consequence, this implies that the set of normalized volumes of all klt singularities has 0 as its only accumulation point. This is a joint work with Ziquan Zhuang.