

## Toric Varieties

Description: Toric varieties are an important class of combinatorial geometric objects where abstract techniques in algebraic geometry can be made extremely concrete. As a result, they form an excellent place where one can formulate and test conjectures. Throughout the course, we will develop a correspondence between the geometry of toric varieties and combinatorial objects called fans. Topics will include line bundles, ample and nef-ness, resolutions of singularities, and the toric minimal model program.