SHARON ROBINS, Simon Fraser University
Versal Deformations of Smooth Complete Toric Varieties

Deformation theory is a vital tool for understanding the local structure of a moduli space around a fixed object X. A systematic approach to studying infinitesimal deformations of X involves defining a functor, Def_X, that associates, for every local Artin ring, the set of deformations over that ring up to equivalence. Despite a theoretical understanding of Def_X, explicit computations with examples are challenging. In this talk, I will discuss the combinatorial description of Def_X when X is a smooth complete toric variety. This is joint work with Nathan Ilten.