GORDON HEIER, University of Houston
On uniformly effective birationality and the Shafarevich Conjecture over curves

We will discuss the following recent effective boundedness result for the Shafarevich Conjecture over function fields. Let B be a smooth projective curve of genus g, and $S \subset B$ be a finite subset of cardinality s. There exists an effective upper bound on the number of deformation types of admissible families of canonically polarized manifolds of dimension n with canonical volume v over B with prescribed degeneracy locus S. The effective bound only depends on the invariants g, s, n and v. The key new ingredient which allows for this kind of result is a careful study of effective birationality for families of canonically polarized manifolds. This is joint work with S. Takayama.