

# Queen's Algebraic Geometry — Seminar —

## THE ISOTRIVIALITY OF A SMOOTH FAMILY OF CANONICALLY POLARIZED MANIFOLDS

BEHROUZ TAJI  
McGill University

### Abstract

A conjecture of Shafarevich, settled by Parshin, predicts that any smooth family of canonically-polarized manifolds over  $\mathbb{C}$  or  $\mathbb{C}^*$  is isotrivial. In other words, the coarse moduli space associated to such families is brody-hyperbolic. Campana has introduced the notion of special varieties as higher analogues of such one dimensional objects and has similarly conjectured that the induced moduli map from any variety parametrizing a smooth family of canonically-polarized manifolds contracts all its special subvarieties. We give a proof of this conjecture by using the recent generic semi-positivity result of Campana and Paun together with the celebrated result of Birkar, Cascini, Hacon and McKernan concerning the existence of log-minimal models of klt pairs with big boundary divisors.

Monday 6 January 2014  
16:30 – 17:30  
319 Jeffery Hall