On the birational structure of Calabi–Yau threefolds in ruled Fano manifolds

Sz-Sheng Wang Institute of Mathematics Academia Sinica

Abstract

Calabi–Yau manifolds arise naturally in birational geometry and mirror symmetry. I will describe explicitly the chamber structure of the movable cone for a general complete intersection Calabi–Yau threefold X in certain (n+4)-dimensional \mathbf{P}^n -ruled Fano manifolds of index n+1 and hence verify the Morrison–Kawamata cone conjecture for such X. This is joint work with A. Ito and C.-J. Lai.