

On the cone of pseudo-effective divisors of complex projective

Carolina Araujo

The cone of pseudo-effective divisors, i.e., divisors that are limits of effective divisors, play an important role in the classification of complex projective varieties. This cone, as well as its dual cone, the cone of nef curves, have been subject of much investigation. In this talk I will present a structure theorem for the cone of nef curves of mildly singular projective varieties from the point of view of the Minimal Model Program. Namely, I will show that if (X, Δ) is a \mathbb{Q} -factorial klt pair, then certain extremal rays of the cone of nef curves of X are pullbacks of curves lying on fibers of Mori Fiber Spaces obtained from X by running a $(K_X + \Delta)$ -Minimal Model Program. This theorem is a consequence of the Minimal Model Program with scaling recently established by Birkar, Cascini, Hacon and McKernan.