Ana-Maria Castravet: Mori Dream Spaces

Mori Dream Spaces form an ideal class of algebraic varieties for which, as the name suggests, the Minimal Model Program works very well. Introduced by Hu and Keel, Mori Dream Spaces can be algebraically characterized as varieties whose total coordinate ring is finitely generated. Prime examples are toric varieties, or more generally, log Fano varieties. Among the examples, there are many moduli spaces, as often variation of GIT gives new birational models. However, there does not exist a satisfactory structure theory for Mori Dream Spaces. In this talk, I will discuss known results and open questions, with special attention payed to the birational geometry of moduli spaces of stable rational curves. Â