

1040-14-114

**Ana-Maria Castravet\*** (noni@math.arizona.edu), 617 N Santa Rita Avenue, University of Arizona, Mathematics Department, Tucson, AZ 85719. *Mori Dream Spaces and moduli spaces of curves*. Preliminary report.

Mori Dream Spaces are varieties for which there is a nice combinatorial description for rational maps to other varieties. A theorem of Yi Hu and Sean Keel asserts that a variety  $X$  is a Mori Dream space if and only if its total coordinate ring is finitely generated.

Hu and Keel posed the question whether the moduli space  $\overline{M}_{0,n}$  of  $n$ -pointed, stable, genus 0 curves is a Mori Dream Space. The underlying open question is to understand the effective cone of  $\overline{M}_{0,n}$ . We construct new extremal rays of the effective cone of  $\overline{M}_{0,n}$  for any  $n \geq 6$ . For  $n = 6$  we recover the Keel-Vermeire divisors. It is a result of Hassett and Tschinkel that the Keel-Vermeire divisors together with the boundary divisors generate the effective cone of  $\overline{M}_{0,6}$ . We show that the corresponding sections generate the total coordinate ring of  $\overline{M}_{0,6}$ . (Received January 29, 2008)