Positivity of divisors on blown-up projective spaces, I

OLIVIA DUMITRESCU AND ELISA POSTINGHEL

Abstract. We study *l*-very ample, ample and semi-ample divisors on the blownup projective space \mathbb{P}^n in a collection of points in general position. We establish Fujita's conjectures for all ample divisors with the number of points bounded above by 2n and for an infinite family of ample divisors with an arbitrary number of points.

Mathematics Subject Classification (2020): 14C20 (primary); 14E25, 14C17, 14J70 (secondary).