

1040-14-104

Tommaso de Fernex* (defernex@math.utah.edu), University of Utah, Department of Mathematics, 155 South 1400 East, Salt Lake City, UT 84103. *Deformations of canonical pairs.*

I will report on a recent research carried out in collaboration with Christopher Hacon. We study flat deformations of pairs (X, D) , where X is a normal variety and D is an effective \mathbb{Q} -divisor such that $K_X + D$ is \mathbb{Q} -Cartier, when the singularities are canonical. We obtain results on the deformation invariance of the singularities and pluri-log-genera. These results are then applied to study the behavior under deformation of nef values and of Mori cones of Fano varieties. (Received January 28, 2008)