1038-14-120   **Tommaso de Fernex*** (`defernex@math.utah.edu`), University of Utah, Department of Mathematics, 155 South 1400 East, Salt Lake City, UT 84112. *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 of 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 February 04, 2008)