SEMINARIO DI GEOMETRIA

8 Novembre 2012, h.11.30-12.30

DISMA, Politecnico di Torino,
AULA BUZANO

SANDRA DI ROCCO

(KTH University)

Higher order toric projective duality

Projective toric duality is the study of the behavior of the dual variety defined by a toric embedding. Via the associated lattice polytopes it explores the behavior of the discriminant of a finite set of integer points. Higher order dual varieties are natural generalizations of the classical dual varieties capturing higher order tangency properties of the given embedding. I will report on results on higher order duals of projective toric embeddings. In particular the computation of the degree of the second dual variety of a smooth toric threefold in geometric and combinatorial terms will be presented. If time permits a description of the tropicalization of the higher dual variety of an equivariantly embedded (not necessarily normal) toric variety will be presented. All this is joint work with A. Dickenstein and R. Piene.