

**ON GEOMETRIC INVARIANT THEORY FOR
HYPERSURFACES AND THEIR HYPERPLANE
SECTIONS**

WEDNESDAY MAY 10, AT 4 PM, IN CUPPLES I ROOM 6

Speaker: Patricio Gallardo (UGA)

Abstract: Geometric Invariant Theory (or GIT) is a method for constructing moduli spaces of varieties in algebraic geometry. In particular, for a hypersurface and a hyperplane in projective space, there is a combinatorial algorithm that allows us to describe the varieties parametrized by the GIT quotient. We will discuss the implementation of this algorithm, its geometric interpretation, and an application of its output for the case of a cubic surface and their anticanonical divisor. The topic of this talk is joint work with J. Martinez-Garcia.