1048-14-103 Sandra Di Rocco, David Eklund, Christopher Peterson* (peterson@math.colostate.edu) and Andrew J Sommese. Intersection Theory and Homotopy for Computation of Invariants.

Intersection theory relates the equivalence of a smooth variety in an intersection product to the degrees of the Chern classes of the variety. Liaison Theory and Homotopy theory is used in conjunction with Intersection theory to compute the degrees of Chern classes and other invariants of smooth varieties. (Received January 30, 2009)