Gábor Farkas

Title: Counting maps with prescribed incidence conditions

Abstract: The question of computing the number of maps of fixed degree d from a curve to a target variety X and verifying n incidence conditions can be viewed as a counterpart of the problem of determining the Gromov-Witten invariants of X. Using degeneration and Schubert calculus, we solve this problem when the target variety is the projective space of dimension r, and determine these numbers completely for linear series of arbitrary dimension when d is sufficiently large. Our formulas generalize recent results of Tevelev and of Cela-Pandharipande-Schmitt. Joint work with C. Lian.