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Title: Towards an equivariant Bézout's theorem

Abstract: Bézout's theorem is a fundamental result in enumerative geometry which can be used to compute the degree of the intersection of a finite number of varieties in general position. In its simplest formulation it can be used to predict the number of points of intersection of n hypersurfaces in $\mathbb{P}^n$, which, when counted appropriately, is given by the product of the degrees of the defining polynomials. The goal of this talk, based on a joint work with S. Costenoble and S. Tilson, is to illustrate how to generalise this classical result and its proof to the case of varieties endowed with an action of $\mathbb{Z}/2$. The solution to this problem crucially relies on the computation for projective spaces of a generalisation due to Costenoble-Waner of Bredon equivariant cohomology.