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Title: Brion's finiteness theorem over perfect fields

Abstract: Let G be a connected reductive group. A G -variety X is called spherical if a Borel subgroup B of G has an open orbit in X . If the ground field is algebraically closed of characteristic zero, Brion has proved that the number of B -orbits in a spherical variety is finite. His method was deformation to the horospherical case. A more general result was obtained independently by Vinberg using the same method. Later Matsuki found a simpler argument by reduction to the rank-1-case. We will present a generalization of the theorems of Brion and Vinberg to arbitrary perfect ground fields. This is joint work with V. Zhgoon.