

ON THE EQUIVARIANT GEOMETRY OF THE COTANGENT VECTOR BUNDLE OF QUASIPROJECTIVE VARIETIES

VLADIMIR S. ZHGOON

Let G be a connected reductive group acting on an irreducible normal algebraic variety X . The aim of this talk is to generalize the result of E.B.Vinberg who constructed the rational Galois covering of T^*X for quasiaffine X by the cotangent bundle to the variety of horospheres. The Galois group of this rational covering is equal to a little Weyl group of the variety X . We notice that this result couldn't be directly generalized to quasiprojective varieties since the set of generic horospheres is not good enough for this purpose, that can be seen in the case when X is a flag variety.

In this talk we give the construction of a family of degenerate horospheres and the variety $\mathcal{H}or$ parametrizing them, such that there is a rational covering of the cotangent vector bundles $T^*\mathcal{H}or \dashrightarrow T^*X$. The Galois group of this rational covering is equal to a little Weyl group of the variety X .