

1176-22-157

George Lusztig* (gyuri@mit.edu). *Strata in reductive groups and in Weyl groups.*

Let G be a reductive connected algebraic group over an algebraically closed field of characteristic $p \geq 0$. There is a natural finite partition of G into subsets called strata such that

(1) each stratum of G is a union of conjugacy classes of the same dimension and at most one of these classes is unipotent;

(2) the indexing set of the set of strata is independent of p and is the same for G and its Langlands dual.

There is also a natural partition of the Weyl group W of G into subsets called strata such that

(3) each stratum of W is a union of conjugacy classes;

(4) the set of strata of W is in natural bijection with the set of strata of G . (Received January 20, 2022)