

1017-22-53

G. Lusztig*, Department of Math., MIT, Cambridge, MA 02139. *On the purity of Springer fibres.*

Let u be a unipotent element of a reductive connected algebraic group G over an algebraic closure of a finite field. Let X be the variety of Borel subgroups of G that contain u . We show that for certain u , the action of Frobenius on the l -adic cohomology of X is pure. This extends an earlier result of Springer. (Received February 07, 2006)