

EQUIVARIANT K -THEORY OF SPRINGER VARIETIES

VIKRAMAN UMA

ABSTRACT. In this talk we shall describe the topological equivariant K -ring, in terms of generators and relations, of a Springer variety \mathcal{F}_λ of type A associated to a nilpotent operator having Jordan canonical form whose block sizes form a weakly decreasing sequence $\lambda = (\lambda_1, \dots, \lambda_l)$. This parallels the description of the equivariant cohomology ring of \mathcal{F}_λ due to Abe and Horiguchi and generalizes the description of ordinary topological K -ring of \mathcal{F}_λ due to Sankaran and Uma.

DEPARTMENT OF MATHEMATICS, INDIAN INSTITUTE OF TECHNOLOGY, MADRAS,
CHENNAI 600036, INDIA

Email address: vuma@iitm.ac.in