

Vikraman Uma

Title: Equivariant K -theory of regular compactification bundles

Abstract: Let G be a connected reductive algebraic group. Let $\mathcal{E} \rightarrow \mathcal{B}$ be a principal $G \times G$ -bundle and X be a regular compactification of G . In this talk we shall describe the Grothendieck ring of the associated fibre bundle $\mathcal{E}(X) := \mathcal{E} \times_{G \times G} X$, as an algebra over the Grothendieck ring of a canonical toric bundle over a flag bundle over \mathcal{B} . These are relative versions of the results on the equivariant K -theory of regular compactifications, and generalize the classical results on the Grothendieck rings of projective bundles, toric bundles and flag bundles.