

Queen's Algebraic Geometry — Seminar —

ABELIAN VS. NONABELIAN EQUIVARIANT K-THEORY

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Abstract

Let G be a compact Lie group, and T a maximal torus. It is well known that the representation ring of G is the subring of the representation ring of T invariant under the action of the Weyl group. I will examine the corresponding problem in equivariant K -theory, where $K_G(X)$ is not the Weyl invariant part of $K_T(X)$, but rather the invariants with respect to the augmentation ideal in an algebra of divided difference operators. Using Dirac induction and Künneth formulae, I will present generalizations of the Weyl Character Formula and Gross-Kostant-Ramond-Sternberg multiplets to equivariant K -theory, from the points of view of both algebraic topology and algebraic geometry.

Monday 12 November 2012
16:30 – 17:30
319 Jeffery Hall