

Bak Groups and Induction Theory

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Abstract

In the talk, we recall that the notion ‘form parameter’ by Anthony Bak enabled us to treat various bilinear forms in a conceptually uniform way. Similarly to Wall’s groups, K_0 - and K_1 -groups of the category of quadratic forms with form parameter over a group ring, referred to as Bak’s groups, turned out to be equivariant-surgery-obstruction groups. It is known that Wall’s group is not a Mackey functor unless the relevant orientation homomorphism w is trivial. So, we introduce a new notion ‘ w -Mackey functor’, discuss that functors of certain Bak’s groups are w -Mackey functors, and show its applications.