

18th NRW Topology Meeting – Bielefeld (Germany)

Saturday, November 17, 2012

13.00, Hörsaal 5

Michael Joachim: (Münster) **“Classification of twists in equivariant K-theory for proper and discrete actions (Joint work with Barcenas, Espinoza and Uribe)”**

We define equivariant K-theory twisted by so-called projective unitary stable equivariant bundles and construct a universal projective unitary stable equivariant bundle for proper actions for a discrete group. We then calculate the homotopy type of the corresponding classifying space for projective unitary stable equivariant bundles and show that in the case of finite group actions, the isomorphism classes of projective unitary stable equivariant bundles are classified by the third equivariant integral cohomology group. Our results extend and generalize results of Atiyah-Segal.