Cohomology of Affine Hecke Algberas of Type A XI Changchang, *Beijing Normal University*

Abstract

In this talk, we shall consider the cohomological global dimension of the affine Hecke algebras $H_n(q)$ of type A, and show that if the characteristic of the ground field is zero and the Poincare polynomial does not vanish at the quantum parameter q, then the affine Hecke algebra of type A has finite global dimension. The proof of this result is based on development of affine cellular algebras, which are introduced recently.

This is a joint work with Steffen Koenig.