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Title: Representation theoretic realization of nonsymmetric Macdonald polynomials at infinity

Abstract: We study the nonsymmetric Macdonald polynomials specialized at infinity from various points of view. First, we define a family of modules of the Iwahori algebra whose characters are equal to the nonsymmetric Macdonald polynomials specialized at infinity. Second, we show that these modules are isomorphic to the dual spaces of sections of certain sheaves on the semi-infinite Schubert varieties. Third, we prove that the global versions of these modules are homologically dual to the level one affine Demazure modules.