The nonsymmetric Macdonald interpolation function

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Two decades ago Knop and Sahi introduced nonsymmetric variants of the Macdonald interpolation polynomials. They are defined in terms of explicit vanishing conditions. They are common eigenfunctions of inhomogeneous versions of the Cherednik operators, and their top homogeneous components are the nonsymmetric Macdonald polynomials.

In this talk I will present various new results on nonsymmetric Macdonald interpolation polynomials. I will discuss a nonsymmetric version of Okounkov's duality, and I will introduce the nonsymmetric Macdonald interpolation function. This is a nonpolynomial common eigenfunction of the inhomogeneous Cherednik operators generalizing the nonsymmetric Macdonald interpolation polynomials.

This talk is based on joint work with Siddhartha Sahi.