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Representations of the Degenerate Affine Sergeev Superalgebra.

As is now well known, if one wishes to study the representation theory of the symmetric group it is often natural to study the degenerate affine Hecke algebra. One then obtains the symmetric group theory as a consequence of this more general setting. The effectiveness of this point of view is well illustrated by the powerful techniques introduced by Grojnowski and Vazirani.

If one wishes to study the spin (ie. projective) representations of the symmetric group, then in an entirely analogous way one is led to study the degenerate affine Sergeev superalgebra. With this as motivation we define an analogue of the Schur-type functor of Arakawa and Suzuki. In their work the functor is between category \mathcal{O} of $\mathfrak{gl}(n)$ and the degenerate affine Hecke algebra. In ours it is between category \mathcal{O} of the Lie superalgebra $\mathfrak{q}(n)$ and the degenerate affine Sergeev superalgebra. (Received August 12, 2008)