In classical Schur-Weyl duality, the Lie algebra \( \mathfrak{gl}(n) \) is studied by relating the endomorphism algebra of \( d \) tensor copies of its vector representation to the symmetric group on \( d \) letters. Arakawa and Suzuki extended this to more general \( \mathfrak{gl}(n) \)-representations by upgrading the symmetric group to the degenerate affine Hecke algebra. This approach provides a diagrammatic perspective on the representation theory and can be also applied to \( \mathfrak{sp}(2n) \) and \( \mathfrak{so}(n) \), where the Brauer algebra replaces the symmetric group. We will recall this classic story and then move towards the periplectic Lie superalgebra.

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Thursday, February 1, 2018
at 4:00 PM in 532 Malott Hall

Refreshments will be served at 3:30 PM in the Mathematics Department lounge (532 Malott Hall).