Tensor spaces and representations of affine q-Schur algebras

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Abstract. In this talk we define an explicit action of the quantum affine gl_n on the tensor space and show that these actions are compatible with the natural embedding from quantum affine gl_n to quantum affine gl_{n+1} . We then apply this result to study simple representations of affine q-Schur algebras.

This is based on joint work with Jie Du.