On framed quiver moduli

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Abstract

Framed quiver moduli, introduced by Nakajima in [2], parametrize certain "stable" pairs consisting of a quiver representation and a map to a fixed graded vector space. They were used in [2] as a preliminary step towards the definition of Nakajima's quiver varieties.

In the first part of the talk, some basic geometric properties of framed quiver moduli for quivers without oriented cycles will be discussed, with emphasis on their cohomology.

In the second part, the use of framed quiver moduli for quantum group constructions, in the spirit of the work of Beilinson, Lusztig and MacPherson [1], will be discussed.

References

[1] A. A. Beilinson, G. Lusztig, R. MacPherson: *A geometric setting for the quantum deformation of* GL_n. Duke Math. J. 61 (1990), no. 2, 655–677.

[2] H. Nakajima: *Varieties associated with quivers.* Representation theory of algebras and related topics (Mexico City, 1994), 139–157, CMS Conf. Proc., 19, Amer. Math. Soc., Providence, RI, 1996.