

Moduli of quiver sheaves.

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Abstract

I will explain a construction of the moduli of semistable quiver sheaves over a projective scheme, extending previous joint work with Alastair King for coherent sheaves. By "quiver sheaf" here, I mean a representation of a quiver in coherent sheaves. The main differences with related previous work by Alexander Schmitt come from the choice of a different semistability condition. Embedding this moduli space in a moduli space for representations of a different quiver in vector spaces, I can use the invariant theory for quiver representations to obtain affine and homogeneous coordinates on the moduli of quiver sheaves, respectively similar to the Hitchin map for Higgs bundles and the generalized theta functions for vector bundles.