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Twisted Quiver Varieties and Higgs Bundles

Quivers have a rich history of being used to construct algebraic varieties via their representations in the category of vector spaces. We consider representations in a different category, namely that of vector bundles on some complex variety equipped with a fixed locally free sheaf which twists the morphisms. In this way we construct interesting subvarieties of Hitchin's moduli space of Higgs bundles, finding especially nice descriptions when the quivers are "argyle", cyclic, or when the underlying variety is the Riemann sphere.