MATTHEW KOBAN, University of Toronto
Bundle representations of double quivers

Representations of finite quivers in the category of vector spaces have been used to great effect in mathematical physics, geometric representation theory, and beyond. In this talk I will discuss a symplectic construction of moduli spaces of representations of quivers in the category of vector bundles over a Riemann surface. For specific quivers these spaces recover both moduli spaces of flat connections, as well as moduli spaces of Higgs bundles, each of which has a rich interaction with geometric quantization. At the same time quiver varieties themselves (in the ordinary sense) can be quantized and one can ask about the extent to which this more general construction admits any reasonable quantization. This is work in progress joint with Lisa Jeffrey and Steven Rayan.