1086-16-98 **Peter J McNamara*** (petermc@math.stanford.edu). Finite dimensional representations of KLR algebras.

Khovanov-Lauda-Rouqier algebras are a family of algebras that appear in categorifying quantum groups. I will talk about the category of finite-dimensional representations of these algebras. This involves classifying the simple representations, relating these to PBW bases, giving some understanding of higher Ext groups, and discussing the related combinatorial structures. (Received July 16, 2012)