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**Speaker:** Dylan Rupel  
University of Notre Dame

Wednesday, February 14, 2018  
3:00 PM  
258 Hurley Hall

**Title:** Cell Decompositions for Rank 2 Quiver Grassmannians

**Abstract:**

A quiver Grassmannian is a variety parametrizing subrepresentations of a given quiver representation. Reineke has shown that all projective varieties can be realized as quiver Grassmannians. In this talk, I will study a class of smooth projective varieties arising as quiver Grassmannians for (truncated) preprojective representations of an  $n$ -Kronecker quiver, i.e. a quiver with two vertices and  $n$  parallel arrows between them. The main result will be a recursive construction of cell decompositions for these quiver Grassmannians together with a combinatorial labeling of the cells by which their dimensions may be directly computed.