

# COLLOQUIUM

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*University of Notre Dame*  
*Department of Mathematics*

Sonja Mapes

Duke University

Will give a lecture entitled  
**Minimal free resolutions of rigid monomial ideals**

On  
Friday, February 18, 2011

at 4:15 PM in Room 117 Hayes-Healy Hall

**Abstract:**

The goal of this talk is to define the what it means for a monomial ideal to be rigid and to give a description of the minimal free resolutions of a subclass of rigid monomial ideals. In doing so I will give a summary of various older results which use topological and combinatorial objects to describe minimal resolutions of other classes of monomial ideals. Specifically I will explain our results for rigid monomial ideals as a generalization of the construction of Bayer, Peeva, and Sturmfels for minimal resolutions of generic monomial ideals. The new results in this talk are joint work with Tim Clark.