

# BI-CO MATHEMATICS COLLOQUIUM

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*“Natural numbers, vector spaces, additive  
categories, and so forth”*

**Monday, October 17, 2011**

Talk at 4:00 – KINSC E309  
Tea at 3:00 – Math Lounge, KINSC H208

## **Abstract:**

Mathematics has various levels of abstraction, each level with its own interesting objects and internal structure. A tremendous amount of current research in pure mathematics can be organized around the informal principle that classical mathematical objects are shadows of some new mathematical objects, these new objects living one level higher up. (This principle sometimes goes by the slightly unfortunate term, "categorification"). I'll illustrate this perspective in some examples, and try to explain how these examples show up in topology and in representation theory.

**Haverford College**