

# BI-CO MATHEMATICS COLLOQUIUM

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*“ $Q$ -Analog, Binomial Coefficients,  
and Catalan Numbers”*

**Monday, November 9, 2015**

Talk at 4:00 – Park 338  
Tea at 3:30 – Park 355, Math Lounge

**Abstract:**

A  $q$ -analog of a number is a polynomial in  $q$  that recalls the original number evaluated at  $q = 1$ . Several  $q$ -analogs play a prominent role in combinatorics, such as  $q$ -factorials,  $q$ -binomial coefficients, and  $q$ -Catalan numbers. We will explore some applications of these  $q$ -analogs as well as a further generalization, the  $q, t$ -Catalan numbers.

**BRYN MAWR COLLEGE**