## Undergraduate Mathematics Colloquium

Brian Miceli Trinity University

## **Combinatorial Enumeration in Pascal's Triangle**

## Friday February 17

Talk at 4:00 in Herman Brown 227 Tea and cookies at 3:30 in Herman Brown 438

ABSTRACT:

Combinatorics is the branch of mathematics that deals with questions of enumeration. We will use Pascal's Triangle to generate conjectures of certain combinatorial identities, and we will give combinatorial proofs of (some of) these conjectures. The talk will introduce an applications of involutions, i.e., functions which are their own inverse, and Fibonacci numbers will make a guest appearance.

**Rice University Department of Mathematics**