



Colloquium

September 28, 4:05 p.m. (9th Period)
(in the Atrium)

Speaker: Keith Copenhaver

Title: Counting With Unknowns: Generating Functions.

Abstract

Combinatorialists (and others) use generating functions to count things. It is a very different perspective where each power of x corresponds to a choice. We will dig into some basic examples of what generating functions are (for those who use power series for more boring things, or not at all), and then move up through some more interesting examples. These will include integer partitions, the product formula, and multivariate generating functions. We will end with a brief look into one application: the number of k -protected vertices in rooted trees of various kinds.