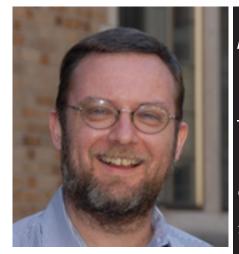# Math Colloquium

Stirling Numbers and the Normal Order Problem

David Galvin, Associate Professor
Department of Mathematics, University of Notre Dame

Thursday

February 20th

4:30pm - 5:30pm

LeConte 412

The Stirling numbers of the second kind, introduced in 1730, arise in many contexts —combinatorial, analytic, algebraic, probabilist, …. I'll introduce these versatile numbers, and describe some of their interpretations and applications.

The standard combinatorial interpretation of the Stirling numbers involves set partitions, and this interpretation has a natural generalization to graphs. I'll discuss an application of this generalization to a problem coming from the Weyl algebra (the algebra on alphabet $\{x, D\}$ with the single relation $Dx=xD+1$). This is joint work with Hilyard and Engbers.

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