GRADUATE STUDENT SEMINAR

Guest Speaker: David Galvin
University of Notre Dame

Date: Thursday, March 31, 2022
Time: 2:00 PM
Location: 125 Hayes-Healy Hall
Zoom URL: notredame.zoom.us/j/93888654312

Lecture Title:
Stirling numbers and the normal ordering problem

Abstract
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 J. Hilyard and J. Engbers.