

“Galois is proof that you cannot recover an object from its dual.”

— Kevin Lin

The Trivial Notions Seminar
Proudly Announces
Galois Theory, but Different

A talk by
Vaughan McDonald

Abstract

In calculus, we are told that the Gaussian integral of $\exp(-x^2)$ cannot be written in “elementary” terms. I’ll explain how one proves this by discussing a Galois theory for linear differential equations, where the notion of “elementary” extensions is analogous to solvable extensions from the Galois theory of polynomials. Time permitting, I may either discuss inverse Galois problems or a Tannakian formulation of differential Galois theory.

Friday, March 8th, at 1:00 pm
Science Center 530