"I smell the blood of an Englishman!" — The Giant

The Trivial Notions Seminar
Proudly Announces

Discuss your favorite Galois representation in ten words or less

A talk by

Jay Pottharst

Abstract

We will show that p-adic Galois representations of a field of characteristic p are very simple: namely, they can be completely determined by specifying a single matrix. This description is in terms of objects called étale φ-modules, which come from *semi*linear algebra. We will state the Dieudonné–Manin theorem, which shows how φ-modules are very nice compared to their corresponding linear algebraic objects. Time permitting, we will sketchily describe how these objects fit into algebraic geometry. Prerequisites: familiarity with (complete) DVRs, including the p-adic numbers, and with Hilbert's Theorem 90.

Friday, September 29$^{\text{th}}$ at 2:00 pm
Science Center 507