

“I don’t know, there’s some sort of duality... Deligne, or Lusztig maybe? Not Deligne–Lusztig. It’s got either one or both or neither of their names in it.”

— David Yang

The Trivial Notions Seminar
Proudly Announces

DL (and maybe DL): by DL

A talk by
Daniel Li

Abstract

Finite groups of Lie type (such as $\mathrm{SL}_2(\mathbb{F}_q)$) form a large family of finite simple groups. (Nevermind that $\mathrm{SL}_2(\mathbb{F}_q)$ itself is usually not simple.) Deligne and Lusztig found a way to systematically construct the character tables of such groups, using the cohomology of what are now called *Deligne–Lusztig varieties*. I will discuss how this works for $\mathrm{SL}_2(\mathbb{F}_q)$. This case was originally discovered by Drinfeld in the course of proving the Langlands correspondence, and time permitting (which it won’t), I’ll explain how.

Friday, February 15th, at 1:00 pm
Science Center 530