"I can't be bothered to prove that. You can write down a proof of this, but it would only tell you that this statement is true, as if you don't know that already."

— Peter Johnstone

The Trivial Notions Seminar
Proudly Announces

Why Do Fields Of Characteristic Zero Exist?

A talk by

Hunter Spink

Abstract

Using "Mathematical Logic", we can answer some of the deepest questions in mathematics, (such as the one presented in the title). I hope to convince you the sketched proof I'll give is better than one of those boring proofs by "here's my favourite field of characteristic zero". Ironically, the proof will ultimately entail just producing a field of characteristic zero. Then we'll prove the Lefschetz Principle that every first order statement over $\mathbb{C}$ is true for all algebraically closed fields of characteristic zero, and prove the characteristic p version of this. With the remaining time, I'll explain why this is almost completely useless, and state Eklof's more useful version of the theorem.

Thursday, December 3rd, at 1:00 pm
Science Center 222