

"I'm sorry, but the number you have dialed is imaginary. Please rotate your phone 90 degrees and try again."

-Pierre Deligne

The Trivial Notions Seminar  
Proudly Announces  
Rationality of del Pezzo Surfaces

A talk by  
Erick Knight

**Abstract**

In part two of the Eric(k) barrage, del Pezzo surfaces are the central objects. Del Pezzo surfaces are algebraic surfaces whose anti canonical bundle is ample. Over an algebraically closed field, all such surfaces are rational. However, over non closed fields, the question of rationality is a subtle one and difficult to answer in general. This talk will focus mainly on cubic surfaces, and a couple of criteria to not be rational. If there is time, double covers of  $\mathbb{P}^2$  will be discussed as well.

Thursday February 7<sup>th</sup>, at 1:00 pm  
Science Center 310