

The Trivial Notions Seminar  
Proudly Announces

Who put analysis in my algebra?

A talk by  
Sanath Devalapurkar

**Abstract**

I'll talk about some analogues in algebraic geometry of results that are traditionally regarded as analytic. In particular, I'll talk about a positive-characteristic analogue of the Hodge decomposition. Time permitting, I will try to discuss a categorification of this, known as nonabelian Hodge theory. For analysts, this result uses tools from Yang-Mills theory; for algebraists, this result uses a strengthening of the Cartier isomorphism. Throughout the talk, I'll try to emphasize my awe at the relationship between complex and positive-characteristic algebraic geometry.

Friday, October 30<sup>th</sup>, at 12 noon