



Speaker: Adam Boocher
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Tuesday, September 25, 2012
12:00 PM
258 Hurley Hall

Title: Gröbner Bases and Free Resolutions

Abstract:

Gröbner bases are an indispensable tool for algebraic calculations today. Given their ubiquity in so many computational algorithms, it is not surprising that they are also an important theoretical tool. In addition, Gröbner bases are in many cases an important object of study in their own right. In this talk I will discuss the relationships between Gröbner bases and free resolutions and try to motivate some unexplored connections between these topics. Along the way, we'll see many examples of universal Gröbner bases, determinantal ideals, and resolutions (big and small). I'll end with some new results on toric ideals.