

Andrew Gillette

Title: An algebraist and a numerical analyst walk into a bar...

Abstract: I will give an introduction to finite element methods, a widely used and mathematically rigorous way to approximate solutions to partial differential equations. While the method was derived out of engineering and numerical analysis communities, recent developments have highlighted the importance of differential geometry and algebra to the success and efficiency of these methods. I will discuss some of the open problems in this developing area and tell the story behind the title of this talk.