

The SUMO Speaker Series for Undergraduates

meets on Wednesdays, 4:30-5:30pm in Room 380-380C (in the basement)

All talks will be accessible to Freshman taking the 50-series
food from Pizza Chicago

Wednesday, October 1st:

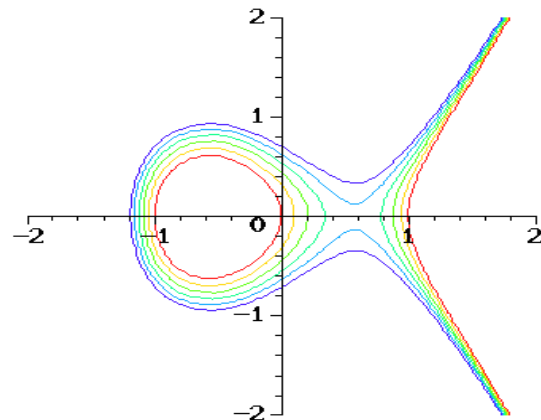
Fermat's Last Theorem and elliptic curves

Professor Brian Conrad

ABSTRACT:

When Andrew Wiles solved Fermat's Last Theorem (FLT) in 1993, he deduced it from a general theorem that he proved about a class of algebraic curves called elliptic curves. Curiously, there is an entirely different (and more elementary!) way in which elliptic curves relate to FLT, by giving a conceptual explanation for what is going on in Fermat's proof of his "Last Theorem" for exponent 4 (the only case he proved, by clever algebraic manipulations).

We will briefly explain what elliptic curves are (not ellipses!) and where they come from, and then use them to re-interpret some of the early mysterious proofs of special cases of FLT in more conceptual terms.



contact Nathan Pflueger (pflueger@stanford.edu) for more information.