Title: An elementary proof of Waring's Theorem

Speaker: Stefaan Delcroix
When/Where: November 19th, @10:30 am, in PB 390

Abstract: I will go over an outline of an elementary proof of Waring's Theorem:

"Given a natural number k, there exists a number g(k) such that every number is the sum of at most g(k) k-th powers."

For example, it is know that every natural number is the sum of four squares.

I will start by going over some notion of density for sequences and Schnirelmann's Inequality. Then I illustrate how this can be used to prove Waring's Theorem. Time permitting, I will go over the Fundamental Theorem. The elementary proof of this theorem involves estimating the number of solutions to linear equations.