Mathematics Colloquium

Estimating the prime counting function

Jesse Elliott Department of Mathematics Cal State, Channel Islands

Friday, November 8, 2019 4:10 – 5 p.m. Building 53 Room 206

Abstract

The prime counting function is the function $\pi(x)$ that for any x > 0 is equal to the number of primes less than or equal to x. The prime number theorem, proved in 1897, states that $\pi(x)$ is asymptotic to $x/\log(x)$. In this talk I will discuss various strengthenings of the prime number theorem that give far more refined estimates of the prime counting function.

About the speaker: Dr. Elliott received his Ph.D. from UC Berkeley in 2003, with advisor Hendrik Lenstra. He is originally from Massachusetts and obtained a B.S. in Mathematics from MIT in 1995. His research is in commutative algebra, number theory, and the philosophy of mathematics. He is currently a professor at California State University, Channel Islands, where he teaches math and philosophy.

Cookies will be provided before the talk at 4 p.m. in the same room as the talk, Building 53 Room 206.