

JOINT ATHENS-ATLANTA NUMBER THEORY SEMINAR
SEMINAR

Bounded gaps between primes

James Maynard
Universite de Montreal

Abstract: It is believed that there should be infinitely many pairs of primes which differ by 2; this is the famous twin prime conjecture. More generally, it is believed that for every positive integer m there should be infinitely many sets of m primes, with each set contained in an interval of size roughly $m \log m$. We will introduce a refinement of the ‘GPY sieve method’ for studying these problems. This refinement will allow us to show (amongst other things) that $\liminf_n (p_{n+m} - p_n) < \infty$ for any integer m , and so there are infinitely many bounded length intervals containing m primes.

Tuesday, February 25, 2014, 5:15 pm
Mathematics and Science Center: W302

MATHEMATICS AND COMPUTER SCIENCE
EMORY UNIVERSITY