Wednesday, September 30, 3:00 p.m. Jeffery 319
Curves Seminar
Speaker: Mike Roth
Title: Operations on vector bundles

Abstract: This is part of the introductory material on vector bundles. We will use the ‘transition function’ description of vector bundles to compute spaces of global sections, and discuss operations on vector bundles, for example: tensor products, duals, symmetric and alternating products.

Friday, October 2, 11:00 a.m. Jeffery 422
Number Theory Seminar
Speaker: Akshaa Vatwani
Title: Patterns of primes in arithmetic progressions

Abstract: A recent result of J. Pintz derives the Green-Tao theorem by combining his previous work on the same with Maynard's work on bounded gaps between primes.

We will discuss the main ideas of this paper.
Abstract: I will present an overview of Sarnak’s conjecture on the disjointness of the Möbius function from any deterministic sequence and the related Chowla’s conjecture on the self-correlations of the Möbius function. These conjectures are intimately related with topological dynamics and ergodic theory. Some progress towards weaker versions of these conjectures have been made recently, and I plan to illustrate them.