## Graduate Number Theory Seminar Spring 2018

## Vinogradov's Mean Value Theorem

Garo Sarajian (UCSB)

Tuesday, April 24, 2018, 1:00 p.m. Room South Hall 6635

**Abstract:** Exponential sums appear in various analytic settings. Improvements on Vinogradov's Mean Value Theorem and corresponding bounds on exponential sums have led to stronger results in a wide variety of places, from zero-free regions of the Riemann zeta function to Waring's Problem. In this talk, we'll discuss Vinogradov's Mean Value Theorem and some of its applications.