# Algebra Seminar

## *Vector-valued Hirzebruch-Zagier series and class number sums*

Brandon Williams
UC Berkeley

**Abstract:** For any fundamental discriminant $D > 0$, Hirzebruch and Zagier constructed a modular form of weight two whose Fourier coefficients are corrections of the Hurwitz class number sums $\sum_{r^2 \equiv 4n \, (D)} H((4n - r^2)/D)$. In this talk, we will discuss how one can reinterpret their result and remove the condition that $D$ is fundamental by working instead with vector-valued modular forms for Weil representations.

Tuesday, April 17, 2018, 4:00 pm
Mathematics and Science Center: W304

Mathematics and Computer Science
Emory University