Philadelphia Area Number Theory Seminar

Cihan Karabulut

William Paterson University

From Hermitian Forms to Bianchi Modular Forms

Abstract: In this talk, I will discuss a family of functions defined by Zagier in a very simple way as sums of powers of quadratic polynomials with integer coefficients. Zagier showed that these functions have several surprising properties and are related many other subjects including modular forms, special values of zeta functions, Diophantine approximation and Dedekind sums. I will also discuss an extension of these functions to complex values using binary Hermitian forms and show that these functions also have similar properties as their real valued relatives.

Wednesday, November 29, 2017, 2:40 - 4:00 PM

Bryn Mawr College, Department of Mathematics Park Science Center **337** Tea and refreshments at 2:20PM in Park 339