

Philadelphia Area Number Theory Seminar

Austin Daughton

Franklin & Marshall College

Zeros of Eisenstein Series and Weakly Holomorphic Forms

Abstract: When given a complex function, one of the most natural questions is that of the locations of the zeros. For modular forms, the attention is primarily given to whether or not the form has zeros at the cusps (i.e. whether or not the form is a cusp form). However, most modular forms have many zeros inside a fundamental domain. While little is known about the zeros of a general form, there have been some results for specific forms or families of forms. In these talks, we will discuss the results of Rankin and Swinnerton-Dyer about the zeros of Eisenstein series and of Duke and Jenkins about certain weakly holomorphic modular forms. Specifically, these authors show that all of the zeros lie on the unit circle.

Thursday, September 24, 2015

Thursday, October 1, 2015

2:40–4:00PM

Bryn Mawr College

Department of Mathematics

Park Science Center **328**

Tea and refreshments at 2:20PM in Park 355