Philadelphia Area Number Theory Seminar

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L-functions, Fourier Coefficients, and Eisenstein Series

Abstract: The analytic properties of L-functions often have arithmetic content. One can study some of these analytic properties by expressing the L-function as an integral of automorphic forms. This approach is known as the Rankin–Selberg method. We will begin by studying the classical nonholomorphic Eisenstein series and the $\mathrm{GL}(2) \times \mathrm{GL}(2)$ Rankin–Selberg method. This will establish a template for us to follow as we consider similar questions on the double cover of $\mathrm{GL}(2)$ (the group on which the theta function lives) and $\mathrm{GL}(3)$. Finally I will discuss some of my work on determining the Fourier coefficients of an Eisenstein series on the double cover of $\mathrm{GL}(3, \mathbb{R})$ and how this relates to our template.

Wednesday, September 28, 2016
3:10–4:30PM

Bryn Mawr College
Department of Mathematics
Park Science Center **328**

Tea and refreshments at 2:50PM in Park 355