## Philadelphia Area Number Theory Seminar

## Austin Daughton Franklin and Marshall College

## Automorphic Integrals and Mock Modular Forms

Abstract: Ramanujan, in his last letter to Hardy, introduced his now wellknown mock theta functions, and there has been a recent resurgence of activity and research pertaining to mock theta functions, mock modular forms, and other closely related functions. However, almost fifty years ago Douglas Niebur discovered a generalization of automorphic forms that turns out to be quite closely related to mock theta functions. These functions that Niebur discovered – automorphic integrals – arose within a completely different context and have also been worked on quite a bit. In this talk, I'll try to explain the bridge between these seemingly different objects and survey some of the work that has been done on them.

> Thursday, February 18, 2016 2:40–4:00PM

Bryn Mawr College Department of Mathematics Park Science Center **328** Tea and refreshments at 2:20PM in Park 355