1093-11-212 **Austin Daughton*** (adaughto@temple.edu). *Dirichlet Series with Functional Equations and General Singularities.*

The correspondence between Dirichlet series with certain nice properties and automorphic forms has been a longstanding facet of analytic number theory. Initiated by Riemann to prove that the zeta function satisfies a functional equation, a full correspondence between 'nice' Dirichlet series and modular forms was given by Hecke in 1936. Since then, there has been a lot of interest in generalizing Hecke's result in many directions (to different levels, higher order groups, different functional equations, nonholomorphic forms, automorphic integrals, etc.). In this talk, I will discuss a generalization to Dirichlet series with the classical functional equation but whose singularities are allowed to be very general and give an application to a problem closely related to Hamburger's Theorem. (Received August 14, 2013)