

Philadelphia Area Number Theory Seminar

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On Bessel functions over complex numbers

Abstract: In this talk, I will introduce Bessel functions over complex numbers in the context of analysis, number theory and representation theory. Such Bessel functions arise in the Voronoi formula and the Kuznetsov formula over the complex field. For the analytic part, I will mainly talk about their integral representations and asymptotic formula. For the representation theoretic part, I will talk about their connections with local functional equations, a kernel formula and the Bessel–Plancherel formula. If time permits, I will also introduce the complex analogue of the classical formulæ of Hardy and Weber, which is motivated from the work of Baruch and Mao on generalizing the Waldspurger formula.

Wednesday, March 29, 2017

2:40–4PM

Bryn Mawr College

Department of Mathematics

Park Science Center **328**

Tea and refreshments at 2:20PM in Park 355