



PI Math Club and Pi Mu Epsilon jointly with the
Colloquium Committee of the Math Department
are pleased to present a talk by



Dr. Edray Goins
Purdue University
Math Professor and Advisor to the Purdue Math Club

TITLE: An Introduction to Dessins d'Enfants: The Intersection of Graph Theory, Group Theory, and Differential Geometry

ABSTRACT: Suppose there are three cottages, and each needs to be connected to the gas, water, and electric companies. Using a third dimension or sending any of the connections through another company or cottage are disallowed. Is there a way to make all nine connections without any of the lines crossing each other? To answer such a question, we explore the properties of planar graphs. It is natural to generalize to graphs which can be embedded into Riemann surfaces, such as the sphere and the torus. In this talk, we discuss how to draw such graphs using Grothendieck's concept of a Dessin d'Enfant. This is based on joint research with Anika Rounds through the Zoltners Summer Undergraduate Research Fellowship.

Wednesday, March 6
at 6 PM
in KT 216

Free pizza and pop following the talk!

Open to all interested students.