

Friday, March 28, 2014, 4:00

COLLOQUIUM TALK

Speaker: Edray Herber Goins

Purdue University

Old Main 2231

## Why Should I Care About Elliptic Curves?

### Abstract:

An elliptic curve  $E$  possessing a rational point is an arithmetic-algebraic object: It is simultaneously a nonsingular projective curve with an affine equation  $y^2 = x^3 + Ax + B$ , which allows one to perform arithmetic on its points; and a finitely generated abelian group  $E(\mathbb{Q}) \simeq E(\mathbb{Q})_{\text{tors}} \times \mathbb{Z}^r$ , which allows one to apply results from abstract algebra. In this talk, we discuss some basic properties of elliptic curves, and give applications along the way.

SNACKS IN FACULTY LOUNGE AT 3:30 PM.  
EVERYONE WELCOME (EVEN IF YOU ARE UNABLE TO ATTEND THE TALK)

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