CCSU
DEPARTMENT OF MATHEMATICAL SCIENCES

COLLOQUIUM

Friday, May 10
3:00 – 4:00 PM
Maria Sanford, Room 101

HOW SINGULAR CAN A CURVE BE?

LANCE MILLER

UNIVERSITY OF ARKANSAS

Abstract: We all have an intuitive idea for what singular means. If you draw the plots of
$$y^2 = x, \; y^2 = x^3, \text{ and } y^2 = x^3(x + 1),$$
one quickly notices all these curves pass through the origin. However, all of the points on the first one look similar whereas the origin in the second two plots seems a bit more interesting/strange than the other points. We call these points singular points for the curve.

In this talk, we will discuss some natural ways to study how singular a curve can be and how this changes if we think about not only curves over real (or complex) numbers, but also with coefficients modulo a prime.

For further information:
gotchevi@ccsu.edu 860-832-2839
http://www.math.ccsu.edu/gotchev/colloquium/