

# Algebra & Number Theory Seminar

Thursday, November 11th, 2010

3:00 pm in Hume 331

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**Title: A Look at the Modular Hyperbola**

## ABSTRACT

In this talk, we will look at the modular hyperbola

$$\{(x, y) : xy \equiv a \pmod{q}\}.$$

In particular, we are interested in the distribution of its points over small squares. Various results will be discussed. Some tools used are Kloosterman sum and additive combinatorics.