



Department of Mathematics and Statistics

COLLOQUIUM

Tuesday, November 17th, 2015

4:00 – 5:00 pm, Adel Mathematics Bldg., Room 164
(refreshments at 3:45)

Andrew Lebovitz

NAU Department of Mathematics and Statistics

Quadratic Residues: A Dynamical Systems Approach

Abstract: In number theory, quadratic residues are traditionally introduced in an purely algebraic context. Instead, we'll approach the subject from an unusual angle by analyzing the graph of the squaring map x goes to x^2 on the set of integers modulo a prime number (a discrete dynamical system). Time permitting, we'll also talk about the application that motivated this approach to the subject of quadratic residues: Pollard's rho algorithm for factoring integers.

Algebra Combinatorics Geometry and Topology (ACGT) Seminar meets every Tuesday, 12:45 – 1:45 pm, AMB 164.

Applied Math Seminar (AMS) will meet occasionally on Thursdays, 12:45 – 1:45 pm, AMB 164. Stay tuned for several upcoming talks.

Friday Afternoon Undergraduate Mathematics Seminar (FAMUS) meets Fridays, 3pm, AMB 164.