



Department of Mathematics and Statistics

COLLOQUIUM

Tuesday, February 18, 2014

Jim Swift

Northern Arizona University

An Introduction to the Swift-Hohenberg Equation

Abstract: The Swift-Hohenberg equation is a Partial Differential Equation (PDE) introduced in 1977 by Jack B. Swift (no relation to our speaker) and Pierre Hohenberg to model pattern formation. Striped patterns and spotted patterns in the plane arise spontaneously as solutions to the PDE. A general introduction is followed by some recent work approximating stationary solutions numerically using the Gradient Newton Galerkin Algorithm.

4:00 – 5:00 pm

Adel Mathematics Bldg., Room 164

(refreshments at 3:45)

ACGT Seminar:

Tuesday, February 18, 12:45 – 2:00 pm, AMB 221. Speaker: Nandor Sieben (NAU),
Title: Boundedness of weak animal achievement games (continued).

Applied Math Seminar (AMS)

Thursday, February 20, 12:45 – 1:35 pm, AMB 224 Speaker: Shafiu Jibrin (NAU),
Title: Finding Analytic Center for Linear Constraints Using Infeasible Newton's Method

Friday Afternoon Undergraduate Mathematics Seminar (FAMUS):

Friday, February 21, 3:00 – 4:00 pm, AMB 164

Speakers: Briahna Preston and Alyssa Whittimore (NAU undergraduates), Title: A Conjecture about Unicyclic Graphs, Faculty guest: Jeff Rushall.