

Auburn Montgomery

Department of Mathematics & Computer
Science

Colloquium/*MAMS*

Time: Friday, September 23, 2016, 2:00pm–3:00pm

Place: Auburn Montgomery, Goodwyn Hall, Room 202

Speaker: Professor James Coykendall, Clemson University

Title: Factorization in Commutative Rings: an Example-Oriented Introduction

Abstract: The study of commutative rings is (put very loosely) the study of mathematical structures where one can add and multiply. The word "factorization" in the title refers to studying the way one can factor (break down) elements in one of these mathematical structures. The prototype of a commutative ring is the ordinary integers, where we learn early on, has unique factorization into primes. But in a garden variety commutative ring, many strange things can happen that can make one feel like the protagonist in a Stephen King novel.

In this talk, we will look at relevant questions in factorization, highlight some of the big (and sometimes surprising) results, and take a short tour of the macabre, yet beautiful, zoo of examples that can be found in the study of factorization.

Short bio of the speaker: Dr. Coykendall is Professor of Mathematics at Clemson University. He obtained his Ph.D. in mathematics from Cornell University. He has obtained many awards in research and teaching. In particular he was the recipient of 2005 Carnegie Foundation U.S. Professor of the year. He holds editorial positions for several journals and has published numerous papers. He is a frequently invited speaker in many conferences and at many universities.

There is also a Math/CS Club and Engineering Club social gathering starting at 1:30pm.

****Refreshments will be served at 1:30pm****

This event is supported by the AUM Lecturer's Program.