



Department of Mathematics and Statistics

COLLOQUIUM

Tuesday, September 30th, 2014

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

Dr. Chester Ismay

Assistant Professor of Statistics, Mathematics and Computer Science Department

Ripon College

(Northern Arizona University Alumni)

Using Parallel Computing and Recursion to Compute a Probability Tree for a Lottery Game.

Abstract: Lottery games often provide a great resource for problems in probability. Sometimes these games also include limited time promotions in order to boost sales and add excitement to the game. In this talk, I will discuss the Green Ball promotion recently used in coordination with the Texas Lottery's Pick 3 game. Specifically, I will give details about the promotion and then discuss algorithms for calculating the probability distribution of X , the number of green balls selected over a set number of draws. Parallel computing and recursion play important roles in calculating this distribution and the focus will be on discussing reasons for using each as well as some examples to show their implementation. In addition, simulation will be discussed as a viable alternative to approximate the probability mass function of X .

Algebra Combinatorics Geometry and Topology (ACGT) Seminar: Tuesday September 30th, 12:45 – 1:45 pm, AMB 164.

Applied Math Seminar (AMS): Thursday, September 18th, 12:45 – 1:45 pm, AMB 164. Speaker: Bill Schulz: Quantum Mechanics.

Friday Afternoon Undergraduate Mathematics Seminar (FAMUS) meets Friday at 3pm.