

## **Department of Mathematics and Statistics**

## COLLOQUIUM

Tuesday, November 29th, 2016

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

## Dr. Kyle Petersen

**DePaul University** 

## **Eulerian Numbers**

Abstract: Every student of mathematics is familiar with Pascal's triangle of binomial coefficients. Though not as well known, the classical Eulerian numbers form a triangle that is almost as nice. These numbers have been given many different combinatorial interpretations, as well as algebraic and geometric interpretations. Via the algebraic and/or geometric interpretations, we can generalize the Eulerian numbers in many ways, e.g., to Coxeter groups, or to certain families of polytopes. I will survey some of the history of Eulerian numbers, including current work and open problems.

Algebra Combinatorics Geometry and Topology (ACGT) Seminar meets every Tuesday, 12:45 – 1:45 pm, AMB 146. Dr. Petersen will also be speaking at the seminar this Tuesday.

Applied Math Seminar (AMS) meets on Thursdays, 12:45 - 1:45 pm, AMB 164.

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