2015

Sixteenth Kenneth C. Schraut Memorial Lecture (Poster)

University of Dayton. Department of Mathematics

Undergraduate Mathematics Day:

An undergraduate mathematics conference

University of Dayton, Saturday, November 7, 2015

15 MINUTE CONTRIBUTED TALKS BY UNDERGRADUATES!!

- **on mathematics research, mathematics education, history of mathematics, and applications of mathematics**

To register to attend or give a talk: follow the Link, or go to http://go.udayton.edu/mathevents

REGISTRATION IS FREE!! COMPLEMENTARY BREAKFAST AND LUNCH

- **SOME SUPPORT FOR HOUSING**
  More Questions? Contact: phovey1@udayton.edu

The Sixteenth Annual Schraut Memorial Lecture

Chikako Mese, Johns Hopkins University
Riemannian Geometry

Riemannian Geometry studies the geometry of curved spaces. It originated with the ideas of the Bernhard Riemann in the 19th century extending Gaussian geometry, or the study of geometry of curves and surfaces contained in 3 dimensional Euclidean space. Riemann's revolutionary idea that curved spaces could be understood in higher dimensions altered the course of mathematics, and with it, of science and our view about our universe.

In this talk, we introduce fundamental concepts in Riemannian Geometry. We discuss the notion of curvature and how it affects the geometry of a space and examine some important research in the field.

Daniel Roberts, Illinois Wesleyan
Graph theory origin story

Many research questions in pure mathematics arise from considerations of real world problems. Part of the job of a mathematician is to ask this type of question. In this talk we will examine the surprising origins of a few questions from the field of graph theory. These examples will provide some insight into how mathematicians meaningfully guide problems from the concrete to the abstract.

Undergraduate Mathematics Day is supported by the Department of Mathematics of the University of Dayton, the College of Arts & Sciences and by mathematics alumni through the Schraut Memorial Lecture Fund