

CCSU
DEPARTMENT OF MATHEMATICAL SCIENCES
VIRTUAL COLLOQUIUM

Friday, May 7

3:00 – 4:00 PM

<https://ccsu.webex.com/meet/gotchev>

MATH 450: STUDENT PRESENTATIONS

Jessica M. Fossum

Latin Squares

Abstract: A Latin square of order n is an $n \times n$ array with entries from a set of n symbols, in which, each of the n symbols appear exactly once in each row and in each column. We will examine elementary properties and operations in regards to Latin squares. We then will focus on the concept of orthogonality in Latin squares, in particular, mutually orthogonal Latin squares and some practical applications of Latin squares.

Matthew W. Allen

On Huang's Resolution of the Sensitivity Conjecture

Abstract: Recently a long-standing conjecture pertaining sensitivity of Boolean functions was proved by Hao Huang. In this talk we define and standardize the form for Boolean functions, and their hypercube representations, explore the different measures of sensitivity of Boolean functions, state and briefly survey the history and importance of The Sensitivity Conjecture and give an outline of Huang's recent succinct proof.

Cameron S.T. Casarotto

Brief Exploration of Fractal Geometry

Abstract: We construct a fractal set that is a loose variation of the quadratic Koch curve and use it to discuss the main concepts of fractal geometry such as the Box Counting dimension, Hausdorff dimension, and Fractal dimension.

For further information:

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