# CCSU DEPARTMENT OF MATHEMATICAL SCIENCES

## COLLOQUIUM

Friday, November 11 2:00 – 3:00 PM Maria Sanford, Room 101

## **SMALLNESS AND SUMS OF ANA SETS**

## ROBERT W. VALLIN

### SLIPPERY ROCK UNIVERSITY

#### ABSTRACT

The Ana Set comes from a class of verbal sequences. Starting with "a", the rule is every "a" is replaced by "ana" and every "n" is replaced by "ann". Thus we begin with

a ana ana ann ana ana ann ana ann ana ann ana

These can be translated into a sequence of subsets of [0,1] in a manner similar to constructing a Cantor set.

In this talk we will look at the Ana Set and the related Golden Ana Set in terms of some indicators of smallness (by considering measure and category) and largeness (by looking at how few of these must we add together to get an interval). The roads we will travel give us a glimpse into how the different topics one works on during a career can merge.

This talk is accessible to graduate students and will contain some open problems.

#### For further information:

gotchevi@ccsu.edu 860-832-2839
http://www.math.ccsu.edu/gotchev/colloquium/