CCSU
DEPARTMENT OF MATHEMATICAL SCIENCES

COLLOQUIUM

Friday, September 9
2:00 – 3:00 PM
Maria Sanford, Room 103

RANDOM FIBONACCI SEQUENCE

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(Joint work with Jeffrey McGowan)

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Abstract

It all started out with imaginary rabbits.

We will start by looking at the usual Fibonacci sequence, then we add a twist let $a_{n+1} = a_n \pm a_{n-1}$**, where the plus or minus sign is chosen by independent flip of a coin. Viswanath showed in 2000 that** $|a_n|$ **grows like** 1.131^n **compare with** 1.61^n **for the usual Fibonacci sequence. His proof involves the use of floating point computer calculations. We will try to give a simple proof and generalize it to some other interesting cases.**

This talk should be accessible to undergraduate students.

AFTERMATH:
Refreshments will follow the colloquium at Castaneda's
(1590 Stanley St. – across from the administration building)

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