

CCSU
DEPARTMENT OF MATHEMATICAL SCIENCES
NSF-STEM SCHOLARSHIP PROGRAM AT CCSU

COLLOQUIUM

Friday, April 30
2:00 – 3:00 PM
Maria Sanford, Room 101

AND THEY LIVED HAPPILY EVER AFTER: THE PIGEONHOLE PRINCIPLE AND RAMSEY THEORY

S. J. SIDNEY

UConn

ABSTRACT

Starting with an old socks-in-the-drawer riddle, we work our way up to the *Happy Ending Theorems* of Esther Klein, Paul Erdős and György (George) Szekeres: Given an integer $p \geq 4$, there is a corresponding integer N such that any set of at least N points in the plane, no three of them collinear, contains a subset of p points that form the vertices of a convex p -gon. The main tools, developed on the way, are the *pigeonhole principle* and its muscular consequence, *Ramsey theory*.

For further information:

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