

**Meeting:** 1003, Atlanta, Georgia, AMS CP 1, AMS Contributed Paper Session

1003-05-617      **Amy N. Myers\*** (amyers@sju.edu), 2606 Naudain Street, Philadelphia, PA 19146. *Bad Squares on Board Games.*

Imagine a board game (such as Monopoly) in which the roll of two dice determines the number of squares we move forward on a given turn. A particularly “bad” square (TWO hotels on Boardwalk!) looms  $m$  squares ahead of our current square. What is the probability that we skip safely over it without landing on it? In this talk we consider a variation of this problem, and extend it both to “one-sided” random walks and to compositions that avoid other compositions. We focus on compositions, and model our notion of composition avoidance after the concept of “pattern avoidance”—a subject which concerns itself with permutations avoiding other permutations. Our consideration of composition avoidance leads us to extend a 1981 result of Guibas and Odlyzko concerning forbidden substrings to the case in which the strings are weighted. (Received September 24, 2004)