

1100-60-370

Jose Angel Islas* (joseislas@my.unt.edu), University of North Texas, Department of Mathematics, Union Circle #311430, Denton, TX 76203, and **Pieter Allaart**, University of North Texas, Department of Mathematics, Union Circle #311430, Denton, TX. *Stopping near the top of a random walk*. Preliminary report.

This talk discusses the problem of maximizing the probability of stopping with one of the two highest values in a Bernoulli random walk with arbitrary parameter p and finite time horizon n . The optimal strategy (continue or stop) depends on a sequence of threshold values (critical probabilities p_n^*) which has an intriguing oscillating pattern. Several properties of this sequence were proven and others conjectured in a 2010 paper by P. Allaart. This talk will discuss recent progress toward proving the conjectures. (Received February 10, 2014)