

**Meeting:** 1005, Newark, Delaware, SS 16A, Special Session on Probabilistic Paradigms in Combinatorics

1005-05-198      **Jozsef Balogh\*** (jobal@math.ohio-state.edu), 231 West 18th, Math Tower, The Ohio State University, Columbus, OH 43210, and **Robin Pemantle**. *The Klee-Minty edge chain moves with constant speed.*

We study the so-called RANDOM-EDGE simplex algorithm on the  $n$ -dimensional Klee-Minty cube. We considered the following model: An infinite sequence of 0's and 1's on the positive integers evolves by flipping each 1 to 0 exponentially at rate one. When a 1 flips then all the bits to its right flip. We show that the speed of the leftmost 1 is constant. This implies that the complexity of the RANDOM-EDGE is quadratic, improving an earlier result of Gunter, Henk and Ziegler. (Received February 09, 2005)