

1014-60-1147 **Michael G Monticino*** (monticino@unt.edu), University of North Texas, P.O. Box 305189, Denton, TX 76203-5189, and **Pieter Allaart**. *Optimal buy/sell rules for correlated random walks*. Preliminary report.

Random walks with correlation provide elementary models of processes that exhibit directional reinforcement behavior. This talk will present optimal multiple stopping strategies - buy/sell rules - for random walks with correlation. The optimal strategies fall into two general classes - cases where conservative buy-and-hold type strategies are optimal and cases in which aggressive trading strategies of successively buying and selling the commodity depending on whether the price goes up or down are followed. Simulation examples will be given based on an stock index fund to illustrate the variation in return possible using the theoretically optimal stop rules compared to simpler buy-and-hold strategies. (Received September 27, 2005)