1020-60-48 **G. Yin*** (`gyin@math.wayne.edu`), Department of Mathematics, Wayne State University, Detroit, MI 48202, **Q.S. Song** (`song@math.wayne.edu`), Department of Mathematics, University of Souther California, and **H.-L. Yang** (`hlyang@hkusua.hku.hk`), Department of Statistics and Actuarial Scienc, University of Hong Kong. *Optimal Barrier Policy for Dividend Optimization.* Preliminary report.

In this talk, we consider an insurance risk model when the dividends are paid to the share holders according to a barrier strategy. A class of algorithms based on stochastic optimization methods is developed to approximate the optimal barrier. In addition to convergence and rates of convergence of the algorithms, numerical results are reported to demonstrate the performance of the algorithms. (Received August 06, 2006)