1120-35-85   **Hong-Ming Yin*** (`hyin@wsu.edu`), Department of Mathematics and Statistics, Washington State University, Pullman, WA 99164, and **Wendy Skulpakdee** (`wskulpakdee@math.wsu.edu`), Department of Mathematics, Washington State University, Pullman, WA 99164. *Portfolio optimization for security investment.* Preliminary report.

In this talk, I will present a modified Merton's portfolio optimization problem for security investment. Interest rate and consumption rate are assumed to be functions of time variable. We will derive the problem as an optimization of wealth subject to certain constrain with underlying a nonlocal partial differential equation. (Received February 14, 2016)