## 1145-60-2455 **Rohini Kumar** and **Hussein Nasralah**<sup>\*</sup>, hmnasralah@wpi.edu. Portfolio optimization for small time horizons.

We study the problem of portfolio optimization in an incomplete market and under general assumptions on the investor's utility function. By constructing classical sub- and supersolutions to the associated HJB equation, we obtain a first order approximation of the value function for small time horizons. A closed-form formula for a close-to-optimal portfolio is then obtained for small time horizons. A scheme to extend our small time results to larger finite horizons will then be discussed. (Received September 25, 2018)