

# Some Non-standard Non-linear Optimal Stopping Problems

Jesper Lund Pedersen

Department of Mathematical Sciences, University of Copenhagen

jesper@math.ku.dk

**Abstract.** In this talk, I will introduce optimal stopping problems which are not on standard form. The objective is to maximize – over all stopping times – a non-linear function of the expected value of the gain process (if the function is linear then it is a standard optimal stopping problem). By examples, optimal strategies will be described and illustrated.

**Keywords** Non-linear optimal stopping; variance maximization problem; diffusion.