

STOCHASTIC CONTROL IN FINANCE
READING GROUP: AUTUMN AND SPRING TERMS OF 2011/12

We will read the following papers and book chapters:

- B. Oksendal, *Stochastic Differential Equations: An Introduction with Applications*, Springer (series Universitext), Sixth Ed. (Chapter 11).
- Merton, R. C. (1971) Optimum Consumption and Portfolio Rules in a Continuous-Time Model, *Economic Theory*, Vol. 3, 373–413.
- Davis, M. and Norman, A. (November 1990) Portfolio Selection with Transaction Costs, *Mathematics of Operations Research*, Vol. 15, No. 4, 676–713.
- S. E. Shreve, J. P. Lehoczky and D. P. Gaver (1984) Optimal Consumption for General Diffusions with Absorbing and Reflecting Barriers, *SIAM J. on Control and Optimization*, Vol. 22, Issue 1, 55–75.
- Paulsen, J. (2007) Optimal dividend payments until ruin of diffusion processes when payments are subject to both fixed and proportional costs, *Adv. in Appl. Probab.*, Vol. 39, No. 3, 669–689.

General reference books on the subject:

- Krylov, N. V., *Controlled diffusion processes*, Springer (1980)
- Fleming, W. H. and Mete Soner, H., *Controlled Markov processes and viscosity solutions*, Springer (2006)
- Pham, H., *Continuous-time stochastic control and optimization with financial applications*, Springer (2009)