

STATISTICAL AND PROGRAMMING TOOLS FOR FINANCE

TOPICS OF THE COURSE:

- Review of statistical theory: statistical model, data reduction, likelihood, point estimation, hypothesis testing, set estimation.
- Programming in R: objects, functions, vectors, matrices, conditional evaluation, looping, data entry, graphics, random number generation.
- Analysis of dataset and statistical inference using R
- Simulation of random variables and simple stochastic processes using R.

READING LIST:

- Casella, George; Berger, Roger L. Statistical inference. 2nd Ed. Duxbury Press, MA, 2002.
- Lindgren, Bernard W. Statistical theory. Fourth edition. Chapman & Hall, New York, 1993.
- Verzani, John. Using R for introductory statistics. Chapman & Hall/CRC, Boca Raton, FL, 2005.
- R software: <http://www.r-project.org/>.