

**STOCHASTIC PROCESSES (Prof. W.Woess, Prof P.Baldi)**

This course is an introduction to stochastic processes with the aim of making the students acquainted with the main basic ideas and tools, with an outlook on some more advanced topics. Prerequisites: it is assumed that interested participants are already familiar with the elements that are provided by a typical basic course in probability with measure theory.

**PROGRAM**

Introductory examples.  
Conditional Expectation.  
Discrete time martingales.  
Discrete time Markov chains.  
Brownian motion and continuous time martingales.

general literature:

Gregory F. Lawler  
Introduction to Stochastic Processes

Sidney I. Resnick  
Adventures in Stochastic Processes

both are electronically available

Class notes also will be distributed