Stochastic processes

1. Main definitions. Finite dimensional distributions.
   Kolmogorov's compatibility theorem.
2. Equivalent processes. Existence of continuous version.
3. Different classes of stochastic processes.
4. Processes with independent increments.
   Process of Brownian motion. Poisson process.
5. Gaussian processes.
6. Stationary processes.
7. Convergence of stochastic processes. Invariance principle.
8. Empirical processes.
9. Martingales.