

STP 186 (Differential Equations for Probability)

Dates: 10.6., 15.6., 24.6. and 28.6., something in September, too, but not very many. The exam is oral and takes place in my office. You sign up to a particular date by sending me an e-mail (maslow@karlin.mff.cuni.cz). **I have to confirm its receipt and specify the time (approximately).** The number of students for each exam is limited, so don't hesitate. If you don't plan to come this semester, I would appreciate if you let me know.

Requirements:

Rigorous and correct formulations of all definitions and statements in the ODE part : generalized solution (in the Caratheodory sense), Thms. on local existence, nonexplosion, continuous dependence on initial data, definition of dynamical system, stability, asymptotic and exponential stability.

Proofs are required for Thm on local existence (based on Schauder fixed point thm), sufficient conditions for nonexplosion (T 1.6) incl. Corolary 1.7, and the theorems on stability (T 1.18, 1.19 and 1.20). Examples!