Prof. Dr. Florian Rupp
Technische Universität Wien, 12.01. – 11.02.2015

Stochastic Differential Equations in Population Dynamics

for the Doctoral Program "Dissipation and Dispersion in Nonlinear Partial Differential Equations"

26th of November 2014

Keywords:

- stochastic modeling of biological processes from first principles,
- Ito's and Stratonovich's stochastic integrals,
- existence and uniqueness of solutions of stochastic ordinary differential equations (SODEs) in the strong and weak sense, boundedness of solutions of SODEs in the positive orthant, strong and weak Taylor schemas and the simulation of paths,
- Fokker-Planck equation and the evolution of densities,
- Random Dynamical Systems, Hopf-bifurcations in SODE-driven systems, and crater densities and the approximation of strange attractors during stochastic Hopf-bifurcations.

Time Schedule:

	Monday (12. 01. 2015)	Tuesday (13. 01. 2015)	Wednesday (14. 01. 2015)	Thursday (15. 01. 2015)	Friday (16. 01. 2015)
8:00 – 10:00					
10:00 – 12:00		11:00 – 13:00			
12:00 – 14:00			13:00 – 15:00		
14:00 – 16:00				14:00 – 16:00	14:00 – 16:00
16:00 – 18:00					

	Monday (19. 01. 2015)	Tuesday (20. 01. 2015)	Wednesday (21. 01. 2015)	Thursday (22. 01. 2015)	Friday (23. 01. 2015)
8:00 – 10:00					
10:00 – 12:00	11:00 – 13:00		13:00 – 15:00	14:00 – 16:00	
12:00 – 14:00		computer lab			
14:00 – 16:00		13:00 – 16:00			
16:00 – 18:00					

	Monday (26. 01. 2015)	Tuesday (27. 01. 2015)	Wednesday (28. 01. 2015)	Thursday (29. 01. 2015)	Friday (30. 01. 2015)
8:00 – 10:00					
10:00 – 12:00	11:00 – 13:00	13:00 – 16:00			
12:00 – 14:00			computer lab		
14:00 – 16:00			13:00 – 15:00		
16:00 – 18:00					

	Monday (02. 02. 2015)	Tuesday (03. 02. 2015)	Wednesday (04. 02. 2015)	Thursday (05. 02. 2015)	Friday (06. 02. 2015)
8:00 – 10:00					
10:00 – 12:00		11:00 – 13:00	11:00 – 13:00	11:00 – 13:00	
12:00 – 14:00					
14:00 – 16:00					
16:00 – 18:00					