Summer Semester 2022
Introduction to Computational Physics (UKWR2)

Lecturer: Rainer Spurzem

Lecture, Wed 9:15-11:00, Fri 11:15-12:00
Tutorials, Mon/Fri 13:15 - 16:00
Participants can choose Monday or Friday tutorial.

Lecture and Tutorials will be offered in **English Language**.

Lecture Time Plan V3 May 6, 2022

Tutorial will appear Wednesday as given in the list - return is usually Friday of the following week. (All data are subject to change depending on progress of lecture)

Wed 9.15	Fri 11.15	Tutorial Number			Chapter-Number: Topic (in old skript see webpage)
20.4	22.4.	1			Introduction, 1-3: Practical Exercises
27.4	29.4.	2			4: Ord. Diff. Eqs. (ODE) I: Two-Body, Euler, Leap Frog
4.5.	6.5.	3			4: ODE II: Runge-Kutta (2,4), 3-body problem
11.5.	13.5.	4			6: ODE III: Numerov-Algorithm, Schrödinger Equation
18.5.	20.5.	5			4: ODE IV: Popul. Dyn., Fixed Points, Stability, Mathematica
25.5.	27.5.	6			*: ODE V: Lorenz-Attractor, Nonlinear Dynamics
1.6.	3.6.	7			5. Linear Algebra I / Matrices / Eigenvalues
8.6.	10.6.	8			5. Linear Algebra II / Householder / QR-QM, ...
15.6.	17.6.	9			5. Linear Algebra III quant. mech., Schrödinger-Eq.
22.6.	24.6.	-			5. Linear Algebra IV, cont'd; Random Numbers I
29.6.	1.7.	10			8: Random Numbers II/Monte Carlo I
6.7.	8.7.	11			9: Monte Carlo II/Ising Model I
13.7.	15.7.	12			9: Ising Model II
20.7.	22.7.	-			Preparation Week (lecture?) Outlook
27.7.	29.7.	-			Exam Week (no lecture)

*: Lorenz-Attractor additional reading material will be handed out.

Public Holidays: May 26 (Thu), June 6 (Mon), June 16 (Thu)

First Tutorial Sheet issued: Wed April 20, to be turned in Fri April 29.

Begin of Tutorials: Fri April 22 / Mon April 25.

Due to public vacation there will be no tutorial on Monday June 6.