

Master of Science Lecture: Soft Matter Physics, Summer Term 2010

Monday		Thursday	
		08.04.2010	info
12.04.2010	lab course 1	15.04.2010	lab course 1
19.04.2010 lecture 1	Repetition: Statistical Mechanics	22.04.2010 lecture 2	Repetition: Stat. Mechanics Elasticity Theory
26.04.2010 lecture 3	Repetition Elasticity Theory	29.04.2010 lecture 4	Interaction of molecules Israelachvili, Chap. 8
03.05.2010 lecture 5 Seminar	Electrostatic forces Israelachvili, Chap. 12.3, 12.5, 12.6, 12.15	06.05.2010 lecture 6	Solvation, Structural and hydration forces Israelachvili, Chap. 13
10.05.2010 Seminar	cancelled due to illness	13.05.2010	bank holiday
17.05.2010 lecture 7 Seminar	Steric and fluctuation forces Israelachvili, Chap. 14	20.05.2010 lecture 8	Static properties of polymers Doi, Chap. 2
24.05.2010	bank holiday	27.05.2010 lecture 9	Finishing Chap. 2, Doi Microscopic basis for viscoelasticity, Doi, Chap. 3.7
31.05.2010 lecture 10 LECTURE 11	Dynamics of flexible polymers in dilute solution Doi, Chap. 4.1, 4.2, 4.7	03.06.2010 lecture 12	Many chain systems Doi, Chap. 5.1, 5.4
07.06.2010	lab course 2	10.06.2010	lab course 2
14.06.2010 lecture 13 Seminar	Dynamics of a polymer in a fixed network Doi, Chap. 6.1-6.3	17.06.2010 lecture 14	Linear viscoelasticity of polymer liquids, rodlike polymers Doi, Chap. 7.3, 8.1
21.06.2010 Seminar	Liquid Crystals deGennes, Chap. 1.1-1.7	24.06.2010	Long and short range order in nematics deGennes, Chap. 2
28.06.2010 lecture 15	lab course 3	01.07.2010 lecture 16	lab course 3
05.07.2010 lecture 17 Seminar	Static disorder in a nematic single crystal deGennes, Chap. 3.1, 3.4, 3.5	08.07.2010 lecture 18	Dynamic properties of nematics deGennes, Chap. 5.1, 5.2, 5.4