

Lecture Week No. 1



Experimental Lectures	Lecture 1: GWs and their effect Danzmann	Lecture 2: Modulation Danzmann	Lecture 3: Interferometer and DC readout Willke	Lecture 4: Fabry-Perot, Pound-Drever-Hall, EOM Heurs	Lecture 5: Interferometer noise sources Heurs
General Relativity	Lecture 1: Equivalence principle, Curved coordinates Babak	Lecture 2: Tensors and Fluids in Special Relativity Babak	Lecture 3: Einstein equations Babak	Lecture 4: Tensors and physics in curved spacetime Babak	Lecture 5: Initial value formulation, Cosmology Babak
Numerical Relativity	Lecture 1: 3+1 split of spacetime Rezzolla	Lecture 2: Formulation of Einstein equations Rezzolla	Lecture 3: Gauges, initial data and GW extraction Rezzolla	Lecture 4: Introduction to relativistic hydrodynamics Rezzolla	Lecture 5: Discretization techniques Rezzolla