

ICTP DIPLOMA PROGRAMME IN HIGH ENERGY PHYSICS 2013-14

SYLLABUS

General Relativity - {24 Lectures = 36 hours} M. O'Loughlin

1. Review of special relativity
2. The equivalence principle
3. General covariance
4. The geodesic equation
5. Introduction to Einstein's equations
6. The Schwarzschild metric, geodesics
7. Experimental tests
8. Gravitational waves