PHY612: THEORETICAL PARTICLE PHYSICS

M.C. Gonzalez-Garcia
12:50-2:10 TuTh: Semester starts January 24th

Weeks 1-2 Jan 24/Feb 2

Week 3 Feb 7/9
Symmetries: Global, chiral symmetries
Abelian and non-Abelian gauge symmetries

Week 4 Feb 14/16
Deep inelastic scattering: quarks and the parton model

Week 5 Feb 21/23
Strong Interactions and QCD

Week 6 Feb 28/March 1
Weak Interactions

Week 7 March 6/8
The Standard Model and the Higgs Mechanism

Week 8 March 13/15
Tests of SM: Precision Measurements and physics at the Z pole

Week 9 March 20/22
Higgs Physics

Week 10 March 27/29
Flavour Physics in the Standard Model: CKM and B Physics

Spring Break (April 2-8)

Week 11 April 10/12
Neutrinos

Week 12 April 17/19
Beyond the Standard Model: GUTS and Technicolor

Week 13 April 24/26
Beyond the Standard Model: MSSM

Week 14 May 1/3
Beyond the Standard Model