March 28, 2023 (Week 10) The Higgs Sector

Objectives:

• Understand the Higgs mechanism and Higgs boson

Outline:

- PDG particle presentations
- Motivations for the Higgs mechanism/boson
- The Higgs mechanism
- Higgs boson couplings
- Higgs boson cross-section
- Higgs boson branching ratios
- Higgs boson mass
- Higgs boson observation
- Higgs boson precision measurements

No homework