Introduction to EFT (6 lectures) — Aneesh Manohar

1. Reasons for using EFT and examples
2. Renormalizable vs Effective Field Theories
3. Dimensional Analysis
4. Power Counting
5. Integrating out W,Z and Fermi theory of weak interactions (tree-level)
6. Loops
7. Matching conditions
8. Decoupling of Heavy Particles
9. Field Redefinitions and Equations of Motion
10. Including non-perturbative effects in EFTs
11. SMEFT and dim 6 operators
12. RGE for SMEFT and applications to Higgs physics