

sec	exam themes
1-5	How to calculate the cross section of a typical process in QED?
6-10	Fermi model: what it is, what it predicts, when it fails
11-15	Field content and symmetries of the Standard Model
16-20	Higgs mechanism
21-25	Quark masses and mixing
26-30	Meson decays through weak interactions
31-35	GIM mechanism
36-40	CP violation in the Standard Model
41-45	Goldstone's theorem and its role in QCD
46-50	Anomalies and their role in the Standard Model
51-55	Grand Unification: motivation, basic ideas, predictions
56-60	Neutrino masses: theoretical description, experimental manifestations