



PHYS2310 Electroweak interactions

[22.5h] 4 credits

This course is taught in the 1st semester

Teacher(s): Jean Pestieau
Language: French
Level: Second cycle

Aims

To throw the bases of the electroweak interaction theory in a quantitative way on experimental tests. To show the essential gain of experiences in the elaboration of a theory.

Main themes

Detailed description of electroweak interactions in the standard model of fundamental interactions: main phenomenon of electroweak disintegrations, electron-neutrino and electron-positron collisions.

Other information (prerequisite, evaluation (assessment methods), course materials recommended readings, ...)

Prerequisites: Quantum mechanics (PHYS 2290); Advanced quantum mechanics II (PHYS 2300).

Support: The reference book is : L.B. Okun, Leptons and Quarks, North-Holland, Amsterdam (1982), mainly the chapters 1-6, 13, 16, 19-23.

Other credits in programs

PHYS22/G Deuxième licence en sciences physiques (4 credits)