

Summer School on Particle Physics

Three Generations of Matter (Fermions)				
	I	II	III	
mass	2.4 MeV	1.27 GeV	171.2 GeV	0
charge	$\frac{2}{3}$	$\frac{2}{3}$	$\frac{2}{3}$	0
spin	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	1
name	u up	c charm	t top	γ photon
Quarks	d down	s strange	b bottom	g gluon
	$-\frac{1}{3}$	$-\frac{1}{3}$	$-\frac{1}{3}$	0
	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	1
	4.8 MeV	128 MeV	4.2 GeV	0
Leptons	ν_e electron neutrino	ν_μ muon neutrino	ν_τ tau neutrino	Z^0 weak boson
	0	0	0	0
	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	1
	0.511 MeV	105.7 MeV	1.777 GeV	91.2 GeV
	e electron	μ muon	τ tau	W weak boson
	-1	-1	-1	± 1
	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	1
	0.511 MeV	105.7 MeV	1.777 GeV	80.4 GeV

Contribution ID: 10

Type: not specified

Symmetries

Tuesday, 17 July 2018 15:00 (2 hours)

Presenter: Dr PANIZZO, Giancarlo