

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
	$\frac{2}{3}$	$\frac{2}{3}$	$\frac{2}{3}$	0
	$-\frac{1}{3}$	$-\frac{1}{3}$	$-\frac{1}{3}$	1
	0	0	0	0
	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	1
	electron	muon	tau	neutrinos
Leptons	e	μ	τ	Z
	0.511 MeV	105.7 MeV	1.777 GeV	91.187 GeV
	-1	-1	-1	0
	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	1
	electron	muon	tau	weak force
				W
				neutrinos
				weak force

Contribution ID: 3

Type: not specified

Relativity I

Presenter: Prof. GIANNOZZI, Paolo