

Summer School on Particle Physics

		Three Generations of Matter (Fermions)					
		I		II		III	
mass		2.4 MeV	1.27 GeV	171.2 GeV	0	0	0
charge		$+\frac{2}{3}$	$+\frac{2}{3}$	$+\frac{2}{3}$	$-\frac{1}{3}$	$-\frac{1}{3}$	0
spin		$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	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	0	0
		$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	1
		v _e electron neutrino	v _{μ} muon neutrino	v _{τ} tau neutrino	Z ⁰ weak force		
		0	0	0	0	0	0
		$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	1
	Leptons	e electron	μ muon	τ tau	W ⁺ weak force		
		0.511 MeV	105.7 MeV	1.777 GeV	80.4 GeV	80.4 GeV	80.4 GeV
		-1	-1	-1	+1	+1	+1
		$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	1

Contribution ID: 31

Type: not specified

Computing lab: Higgs

Tuesday, 24 July 2018 14:00 (3 hours)

Presenters: Dr PANIZZO, Giancarlo; Prof. COBAL, Marina; Dr PINAMONTI, Michele