

# Summer School on Particle Physics

Three Generations of Matter (Fermions)

	I		II		III	
mass	2.4 MeV	4.8 MeV	124 MeV	1.27 GeV	171.2 GeV	0
charge	$+\frac{2}{3}$	$-\frac{1}{3}$	$+\frac{2}{3}$	$-\frac{1}{3}$	$+\frac{2}{3}$	$0$
spin	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$1$
name	u up	d down	c charm	s strange	t top	b bottom
Quarks						$\gamma$ photon
	$\nu_e$ electron neutrino	$\nu_\mu$ muon neutrino	$\nu_\tau$ tau neutrino	$\nu_e$ electron neutrino	$\nu_\mu$ muon neutrino	$\nu_\tau$ tau neutrino
Leptons	e electron	$\mu$ muon	$\tau$ tau			
						Z weak force
						W weak force
						g strong force

Contribution ID: 9

Type: not specified

## Radiation-Matter Interaction I

Tuesday, 17 July 2018 14:00 (1 hour)

**Presenter:** Prof. COBAL, Marina