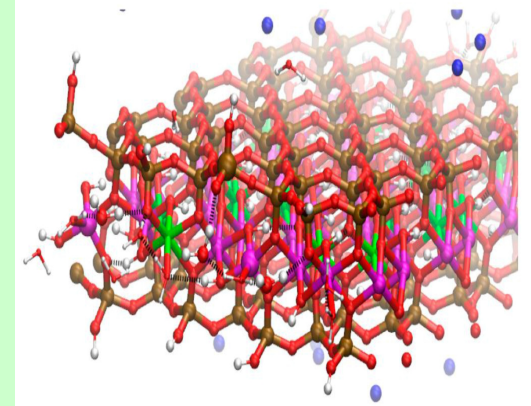
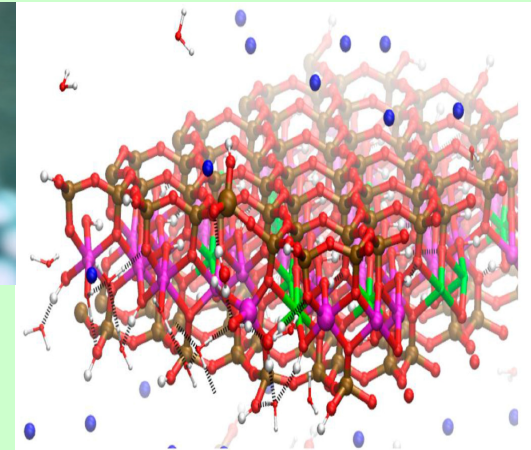
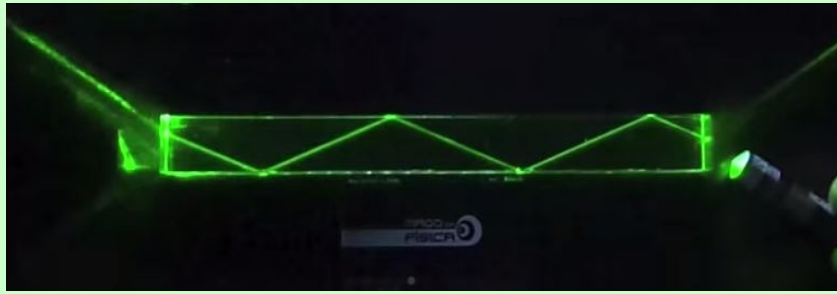


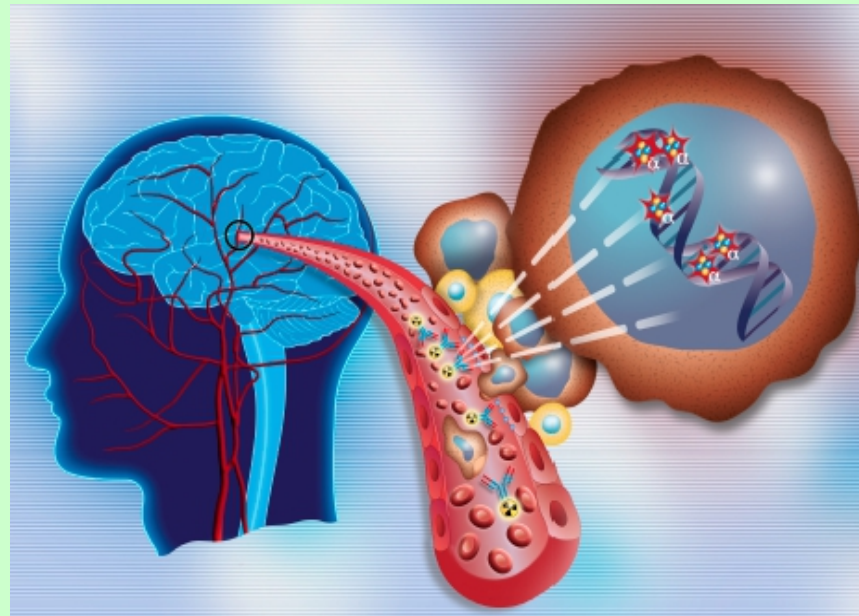
XXXIX OFICINA DE FÍSICA “César Lattes”

“Impacto da pesquisa básica em nossas vidas”

16/Junho/2018



Three Generations of Matter (Fermions)					
	I	II	III		
mass→	3 MeV	1.24 GeV	172.5 GeV	0	125.7 GeV
charge→	$\frac{2}{3}$	$\frac{2}{3}$	$\frac{2}{3}$	0	0
spin→	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	1	0
name→	u up	c charm	t top	γ photon	H Higgs
Quarks	6 MeV $-\frac{1}{3}$	95 MeV $-\frac{1}{3}$	4.2 GeV $-\frac{1}{3}$	0	0
	d down	s strange	b bottom	g gluon	G Graviton
	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	1	2
Leptons	<2 eV 0	<0.19 MeV $\frac{1}{2}$	<18.2 MeV $\frac{1}{2}$	90.2 GeV 0	0
	ν_e electron neutrino	ν_μ muon neutrino	ν_τ tau neutrino	Z weak force	
	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	1	
Bosons (Forces)	0.511 MeV -1	106 MeV -1	1.78 GeV -1	80.4 GeV ± 1	
	e electron	μ muon	τ tau	W weak force	
	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	1	



Imagens ilustrativas

Realização



Inscrições e informações:

<https://portal.ifi.unicamp.br/oficinas-de-fisica>

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