

< 2 eV
fermion
0

ν_e

electron-
neutrino

< 190 keV
fermion
0

ν_μ

muon-
neutrino

< 18.2 MeV
fermion
0

ν_τ

tau-neutrino

91.2 GeV
vector boson
0

Z

Z boson

80.4 GeV
vector boson
 ± 1

W

W boson

125.1 GeV
scalar boson
0

H

Higgs boson

511 keV
fermion
-1

e

electron

106 MeV
fermion
-1

μ

muon

1.78 GeV
fermion
-1

τ

tau lepton

massless
vector boson
0

γ

photon

2.2 MeV
fermion
+2/3

u

up quark

1.28 GeV
fermion
+2/3

c

charm quark

173.1 GeV
fermion
+2/3

t

top quark

massless
vector boson
0

g

gluon

4.7 MeV
fermion
-1/3

d

down quark

96 MeV
fermion
-1/3

s

strange quark

4.18 GeV
fermion
-1/3

b

bottom quark

strong interaction

electromagnetic interaction

weak interaction