July 1995

(Approximate closing date for data: January 1, 1995)

GAUGE AND HIGGS BOSONS

γ

$I(J^{PC}) = 0,1(1^{--})$

Mass $m < 3 \times 10^{-27}$ eV
Charge $q < 2 \times 10^{-32}$ e
Mean life τ = Stable

g or gluon

$I(J^{P}) = 0(1^{-})$

Mass $m = 0$ [a]
SU(3) color octet

W

$J = 1$

Charge $= \pm 1$ e
Mass $m = 80.22 \pm 0.26$ GeV
$m_Z - m_W = 10.96 \pm 0.26$ GeV
$m_{W^+} - m_{W^-} = -0.2 \pm 0.6$ GeV
Full width $\Gamma = 2.08 \pm 0.07$ GeV

W^- modes are charge conjugates of the modes below.

W^+ DECAY MODES		Fraction (Γ_i/Γ)	Confidence level	p (MeV/c)
$\ell^+ \nu$	[b]	(10.8±0.4) %		40110
$e^+ \nu$		(10.8±0.4) %		40110
$\mu^+ \nu$		(10.6±0.7) %		40110
$\tau^+ \nu$		(10.8±1.0) %		40110
hadrons		(67.8±1.5) %		–
$\pi^+ \gamma$		$< 5 \times 10^{-4}$	95%	40110