LEPTONS

Neutrinos

See the Full Listings in the *Review of Particle Properties* (Physical Review **D50** 1173 (1994)) for a Note giving details of neutrinos, masses, mixing, and the status of experimental searches.

ν_e

$J = \frac{1}{2}$

Mass m: The formal upper limit, as obtained from the m^2 average (see the Full Listings), is 5.1 eV at the 95%CL. Caution is urged in interpreting this result, since the m^2 average is positive with only a 3.5% probability. If the weighted average m^2 were forced to zero, the limit would increase to 7.0 eV.

Mean life/mass, $\tau/m_{\nu_e} > 300$ s/eV, CL = 90%

Magnetic moment $\mu < 1.08 \times 10^{-9}\ \mu_B$, CL = 90%

ν_μ

$J = \frac{1}{2}$

Mass $m < 0.27$ MeV, CL = 90%

Mean life/mass, $\tau/m_{\nu_\mu} > 15.4$ s/eV, CL = 90%

Magnetic moment $\mu < 7.4 \times 10^{-10}\ \mu_B$, CL = 90%

ν_τ

$J = \frac{1}{2}$

Mass $m < 31$ MeV, CL = 95%

Magnetic moment $\mu < 5.4 \times 10^{-7}\ \mu_B$, CL = 90%

e

$J = \frac{1}{2}$

Mass $m = 0.51099906 \pm 0.00000015$ MeV [a]

$= (5.48579903 \pm 0.00000013) \times 10^{-4}$ u

$(m_{e^+} - m_{e^-})/m < 4 \times 10^{-8}$, CL = 90%

$|q_{e^+} + q_{e^-}|/e < 4 \times 10^{-8}$

Magnetic moment $\mu = 1.001159652193 \pm 0.000000000010\ \mu_B$

$(g_{e^+} - g_{e^-})\ /\ g_{\text{average}} = (-0.5 \pm 2.1) \times 10^{-12}$

Electric dipole moment $d = (-0.3 \pm 0.8) \times 10^{-26}\ e$cm

Mean life $\tau > 2.7 \times 10^{23}$ yr, CL = 68% [b]