A decay momentum p is given for each decay mode. For a 2-body decay, p is the momentum of each decay product in the rest frame of the decaying particle. For a 3-or-more-body decay, p is the largest momentum any of the products can have in this frame. For any resonance, the *nominal* mass is used in calculating p. A dagger ("†") in this column indicates that the mode is forbidden when the nominal masses of resonances are used, but is in fact allowed due to the nonzero widths of the resonances.

[*a*] The masses of the p and n are most precisely known in u (unified atomic mass units). The conversion factor to MeV, $1\ \mathrm{u} = 931.49432 \pm 0.00028$ MeV, is less well known than are the masses in u.

[*b*] The limit is from neutrality-of-matter experiments; it assumes $q_n = q_p + q_e$. See also the charge of the neutron.

[*c*] The first limit is geochemical and independent of decay mode. The second limit assumes the dominant decay modes are among those investigated. For antiprotons the best limit, inferred from the observation of cosmic ray $\overline{p}$'s is $\tau_{\overline{p}} > 10^7$ yr, the cosmic-ray storage time, but this limit depends on a number of assumptions. The best direct observation of stored antiprotons gives $\tau_{\overline{p}}/\mathrm{B}(\overline{p} \to e^- \gamma) > 1848$ yr.

[*d*] There is some controversy about whether nuclear physics and model dependence complicate the analysis for bound neutrons (from which the best limit comes). For reactor experiments with free neutrons, the best limit is $> 10^7$ s.

[*e*] The parameters g_A, g_V, and g_{WM} for semileptonic modes are defined by $\overline{B}_f[\gamma_\lambda(g_V + g_A\gamma_5) + i(g_{WM}/m_{B_i})\ \sigma_{\lambda\nu}\ q^\nu]B_i$, and ϕ_{AV} is defined by $g_A/g_V = |g_A/g_V| e^{i\phi_{AV}}$. See the "Note on Baryon Decay Parameters" in the neutron Full Listings in Physical Review **D50** 1173 (1994).

[*f*] Time-reversal invariance requires this to be 0° or 180°.

[*g*] The decay parameters γ and Δ are calculated from α and ϕ using

$$\gamma = \sqrt{1-\alpha^2}\ \cos\phi\,, \qquad \tan\Delta = -\frac{1}{\alpha}\ \sqrt{1-\alpha^2}\ \sin\phi\,.$$

See the "Note on Baryon Decay Parameters" in the neutron Full Listings in Physical Review **D50** 1173 (1994).

[*h*] See the Full Listings in Physical Review **D50** 1173 (1994) for the pion momentum range used in this measurement.

[*i*] The error given here is only an educated guess. It is larger than the error on the weighted average of the published values.

[*j*] A theoretical value using QED.

[*k*] The branching fraction includes all the decay modes of the final-state resonance.

[*l*] The value is for the sum of the charge states indicated.

[*m*] ℓ indicates e or μ mode, not sum over modes.