Abstract: Let Q denote a function from the nonnegative integers into the real numbers, such that: $Q(0) = 1.000000509157$; $Q(1) = Q(0) \times (4\pi))$; $Q(2) = Q(0) \times (4\pi) \times (4\pi - 1/\pi)$; $Q(3) = Q(0) \times (4\pi) \times (4\pi - 1/\pi) \times (4\pi - 2/\pi)$; $Q(4) = Q(0) \times (4\pi) \times (4\pi - 1/\pi) \times (4\pi - 2/\pi) \times (4\pi - 3/\pi)$; $Q(5) = Q(0) \times (4\pi) \times (4\pi - 1/\pi) \times (4\pi - 2/\pi) \times (4\pi - 3/\pi) \times (4\pi - 4/\pi)$.

Consider $Q(3) = 1836.15267389$ and $Q(5) = 240773.8273$. $Q(3)$ is the CODATA value for the ratio of the proton mass to the electron mass.[1] $Q(5)$ approximates the mass ratio of the Higgs Boson to the electron. (The value of $Q(5)/Q(3)$ is 131.1295246.[2]) If the CODATA value for the mass ratio of the proton to the electron is revised, it will only have to be changed in $Q(0)$. The approximation $Q(5)/Q(3)$ is compared with changing values of the mass ratio of the Higgs Boson to the proton.

Future: The value of the ratio of the mass of the proton to the mass of the electron is unlikely to change much in the future; that is, from six significant figures $(4\pi)(4\pi - 1/\pi)(4\pi - 2/\pi) \approx 1836.15$. The mass ratio of the Higgs Boson to the proton is very likely to gravitate around 133 or so. For sure one can speculate or predict that the mass ratio of the Higgs Boson to the proton might be 131.13. The difficulties associated with making any measurement on such an unstable particle with a very short half-life are seemingly insurmountable.

Function Q: Define the function Q from the nonnegative integers into the real numbers as follows: For $k = 0, 1, \ldots, 5$, define Q as above. For k a positive integer greater than 5, define

$$Q(k) = Q(0) \times (4\pi) \times \left(4\pi - \frac{1}{\pi}\right) \times \cdots \times \left(4\pi - \frac{k-1}{\pi}\right) \tag{1}$$

Notice that in the interval $[0, 39]$ the value of Q is positive. Notice also that the function has a relative maximum at $k = 36$; $Q(36) = 1.47526\text{E} + 028$.

[1]https://physics.nist.gov/cgi-bin/cuu/Value?mpsme

[2]https://atlas.cern/updates/physics-briefing/new-atlas-measurement-higgs-boson-mass

Mass: When pair-production occurs, what's to stop the mass of the positron from have a tiny bit more mass than the electron? In such a small amount that it would appear to be infinitesimal. For instance: $m_{e^+} > m_{e^-}$. Here m_{e^+} is the mass of the positron and m_{e^-} is the mass of the electron. In particular:

$$\frac{m_{e^+}}{m_{e^-}} \approx 1.000000509157 \tag{2}$$

For sure, the charges and spins acquired during pair-production must balance. But the solid geometry does not prohibit mass difference, of a sufficiently small magnitude.

This approach would begin to explain why the universe isn't composed of equal parts matter and antimatter.

Wait: To be sure, one must wait for at least a score of years before the value of the Higgs Boson has a recommended value, such as the proton-electron mass ratio. Until then the "Mass Function Q" will remain speculative.