The Mass can't conservation in β^+ decay

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Abstract: Showing the mass can not conservation in the β^+ decay of a proton

Main Viewpoint & Result:

In the[1], we know, unstable atomic nuclei with an excess of protons may under go β^+ decay, also called positron decay, where a proton is converted into a neutron, a positron and an electron-type neutrino:

a **Proton (P)** → a **Neutron (N)** + a **Positron (Po)** + a **Neutrino (Ne)** (i)

Beta plus decay can only happen inside nuclei when the absolute value of the binding energy of the daughter nucleus is greater than that of the mother nucleus, i.e., the daughter nucleus is a lower-energy state [1].

By the *Law of conservation of mass* and (i), we have

$$\mathbf{M_P \geq M_N + M_{Po} + M_{Ne}}$$

Then there be $M_P > M_N$.

We know, M_P=1.007276u; M_N=1.008665u; M_{Po}=0.00054858u; 1u=1.660565•10^{-27}kg, then we get, in the β^+ decay of a Proton, there be exist non conservation of mass.

By the way, Beta plus decay really happened? Positrons really exist?

Reference

[1] http://en.wikipedia.org/wiki/Beta_particle