

A New Model of the Neutron Based on π -Mesons

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Abstract: this article put forward a model of the neutron based on π -mesons

Main viewpoint & conclusions:

A free π -meson is unstable, a short time after (not more than 8.4×10^{-17} seconds), the free π -meson fission to an electron and a neutrino;^[1] and a free neutron also is unstable, after a short period of time (about 14 minutes and 42 seconds), the free neutron fission to a proton, an electron and a neutrino;^[2] even the neutrino has no its own antiparticle,^[3] There is

$$\text{a } \pi\text{-meson} \rightarrow \text{an electron} + \text{a neutrino} \quad (\text{i})$$

$$\text{a neutron} \rightarrow \text{a proton} + \text{an electron} + \text{a neutrino} \quad (\text{ii})$$

Then we have

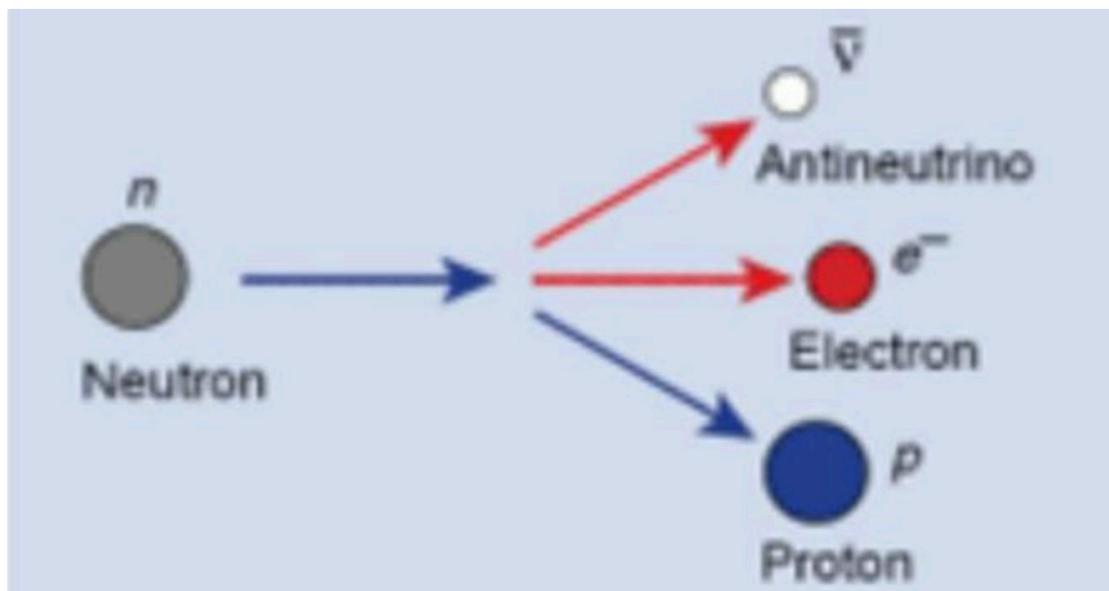
$$\text{a } \pi\text{-meson} = \text{an electron} + \text{a neutrino} \quad \text{and}$$

$$\text{a neutron} = \text{a proton} + \text{an electron} + \text{a neutrino}$$

Even

$$\text{a neutron} = \text{a proton} + \text{a } \pi\text{-meson}$$

That is to saying; the neutron is one kind of composite particles that is composed of a proton with a π -meson.



The image select from the network, not for any commercial purposes, thanks to authors.

References

[1] Pion <http://en.wikipedia.org/wiki/Pion>

[2] Neutron <http://en.wikipedia.org/wiki/Neutron>

[3] The Neutrino Has No its own Antiparticle <http://rxiv.org/abs/1601.0232>