

# $\pi$ -Meson and the Structure of a Nucleus

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Abstract: put forward a new combination mechanism of nuclear (hadrons)

## **Main Viewpoint & Result:**

$\pi$ -meson[1] is the polymer (adhesive) which makes protons together. Within a nucleus, there are no so much protons and neutrons together, but a more accurate description should be: some protons through sharing  $\pi$ -mesons combination (adhesive) together.

This means that within a nucleus, there is no independent of neutrons; an atomic nucleus is formed by some protons combining with  $\pi$ -mesons. But in the whole, it seems some protons and neutrons together to form the nucleus.

There is no any  $\pi$ -meson inside a proton, “ between the protons and protons; between the protons and neutrons” by sharing  $\pi$ -mesons together, rather than by exchanging  $\pi$ -mesons combination.

This is called the "nuclear" (hadrons) combined with mechanism!

## **Reference**

[1] < A New Model of a Neutron Based on  $\pi$ -Meson >

<http://vixra.org/abs/1405.0206>