

Relative characteristics for estimating the neutron mass of the nuclear decay process

Wednesday, 13 October 2021 16:45 (15 minutes)

The purpose of the article is to theoretically evaluate the possibility of determining the value of the neutrino (antineutrino) mass in the beta decay process by measuring the relative characteristics of asymmetries and polarizations.

Research procedure and methods. The idea of the method in calculating the squares of matrix elements and in minimizing the influence of poorly studied structures of nuclei and nucleons in experiments on measuring the relative characteristics.

Research results. The possibility of carrying out new laboratory experiments to determine the magnitude of the neutrino (antineutrino) mass by measuring the asymmetries and polarizations of particles is shown theoretically.

Primary author: ALIBIN, Maksim

Presenter: ALIBIN, Maksim

Session Classification: Theoretical Physics

Track Classification: Theoretical Physics