# Download Neutron Capture Cross Section

In nuclear and particle physics, the concept of a neutron cross section is used to express the likelihood of interaction between an incident neutron and a target nucleus.Neutron capture is a nuclear reaction in which an atomic nucleus and one or more neutrons collide and merge to form a heavier nucleus. Since neutrons have no electric charge, they can enter a nucleus more easily than positively charged protons, which are repelled electrostatically.PS 213 Outline The n_TOF Collaboration • Scientific motivations • The n_TOF facility • The experimental apparatus • The measurement campaign • Results • Conclusions P. F. Mastinu Neutron cross section measurements at n-TOF for ADS related studies ...Unless otherwise stated this page contains Version 1.0 content (Read more about versions) 4.7.2 Neutron cross-sections. If n(E) dE is the number of neutrons per unit volume of a material having an energy between E and E + dE, then the neutron flux, ?, is defined as ?(E) = n(E)?, where ? is the neutron velocity.