

Joint seminar of the NPI of the CAS

Mgr. Daria Denisova,
Department of Theoretical Physics, NPI:

Electroproduction of hypernuclei

Electroproduction of hypernuclei is an object of interest since information on properties of the bound system of nucleons and a hyperon gives important insight onto the structure of nuclear matter and provides a stringent test of the hyperon-nucleon interactions. We will present a technique (distorted-wave impulse approximation) of computing the cross sections in electroproduction of Lambda-hypernuclei discussing various components of the amplitude, such as the radial integrals, the elementary amplitude, and the nucleus-hypernucleus structure. Particularly, we will show effects in the cross sections from the kaon distortion, proton Fermi motion and description of the nucleus structure (one-body density matrix elements).

The seminar will take place on Thursday, April 13, 2023 at 10:00 a.m. in the NPI conference room.