

This thesis aims to analyze the influence of the neutron background of a nuclear reactor on measurement of the ν GeN experiment which is placed underneath it. This experiment is designed for detection of the CE ν NS (coherent elastic neutrino-nucleus scattering). A simulation of the neutron spectrum based on an on-site measurement is performed using the GEANT4 framework. The results are then compared with the expected CE ν NS signal and the first measurements of the experiment and discussion is carried out regarding its role and the effect of the experiment shielding.