

A new ep collider LHeC is currently planned at CERN. LHeC should complement the physics program of former ep collider HERA and existing hadron-hadron collider LHC. In the LHeC project the collisions of electrons with energy 60 GeV and protons with energy 7 TeV should be studied. The thesis is focused on the study of diffractive charged current deep inelastic scattering interactions, which had already been investigated at HERA collider (H1 experiment), but with unsatisfying statistics. This thesis reproduce Monte Carlo predictions obtained by H1 collaboration for this process and its main goal is calculation of diffractive charged current DIS cross section for future LHeC project.