

## **Abstract**

Theoretical analysis of bremsstrahlung production in muon-nucleus collisions via laser, using the dipole approximation, was carried out. We investigate the effect of laser-assisted Bremsstrahlung on the energy loss of muons as they interact with a bare nucleus (positive ion). We have theoretically calculated the energy spectra of the emitted photons and studied their dependence on the laser field and muon energy. We found that the addition of the laser field resulted in a significant increase in the energy loss of the muon, and that the energy spectra of the emitted photons were modified by the presence of the laser field. It is expected that we can get photons of higher energy.