The 7th international conference on particle physics and astrophysics



Contribution ID : 285

Type : Poster

Monte Carlo simulations of photon propagation in the DIRC

Thursday, 24 October 2024 16:30 (30)

The particle identification system for the barrel region of the ePIC experiment at the future Electron-Ion Collider will be based on a DIRC detector. DIRC stands for Detection of Internally Reflected Cherenkov light, and this technology is planned to be used for charged particle identification for momenta up to at least 6 GeV/c. The DIRC technology is sensitive to the optical properties of the materials comprising the optical system of the detector. This contribution presents simulation studies of optical properties for fused silica, NLAK3, and optical sapphire glass.

Primary author(s) : APARIN, Alexey (JINR)

Co-author(s) : Ms. KUTINOVA, Olga (JINR); Dr. PATSYUK, Maria (JINR); Ms. SEITOVA, Diana (Institute of Nuclear Physics, Kazakhstan)

Presenter(s): APARIN, Alexey (JINR)

Session Classification : Poster session

Track Classification : Facilities and advanced detector technologies