

Cherenkov PID detector for super tau-cham facility

Wednesday, August 10, 2022 9:00 AM (15 minutes)

The Super tau-Charm facility (STCF) project, which is an electron-positron collider at the center-of-mass 2~7 GeV, is under exploring and will play crucial role in the high density frontier of elementary particle physics. The PID detector in STCF serves an excellent PID capability for charged hadrons. The effective PID is required to reach a statistical separation power better than 3 sigma to fulfill the desired physics goals. In the conceptual design, Cherenkov detector is one suitable technology for PID. In this report the two kinds of Cherenkov detector is described: Ring Image Cherenkov detector for the barrel, and the Dirt-like TOF for the end-cap.

Primary author: 刘, 倩 (University of Chinese Academy of Sciences)

Presenter: 刘, 倩 (University of Chinese Academy of Sciences)

Session Classification: Parallel Session III (5): Particle Detector Technology

Track Classification: 粒子物理实验技术