

The Offline Software of BESIII Muon detector

Tuesday 24 March 2009 08:00 (20 minutes)

The new spectrometer for the challenging physics in the tau-charm energy region, BESIII, has been constructed and gone into the commissioning phase at BEPCII, the upgraded e+e- collider with peak luminosity up to $10^{33} \text{cm}^{-2} \text{s}^{-1}$ in Beijing, China. The BESIII muon detector will mainly contribute to the distinguishing muons from hadrons, especially the pions. The Resistive Plate Chambers (RPCs) have been used to the BESIII muon detector. These RPCs work in the streamer mode and are made of a new type of bakelite material with melamine treatment instead of linseed oil treatment. The offline software of BESIII muon detector has been developed successfully and validated preliminarily with cosmic ray data and $\Psi(2S)$ data. We describe the ideas and implementation of the simulation, reconstruction and calibration packages. The detector commissioning and software validation results are presented. The Monte Carlo and data comparison are shown.

Presentation type (oral | poster)

poster

Author: YUGUANG, Xie (Institute of High energy Physics, Chinese Academy of Sciences)

Presenter: YUGUANG, Xie (Institute of High energy Physics, Chinese Academy of Sciences)

Session Classification: Poster session

Track Classification: Event Processing