## 探测器与实验方法

# BESIII track fitting algorithm

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### 摘要

A track fitting algorithm based on the Kalman filter method has been developed for BESIII of BEPC II. The effects of multiple scattering and energy loss when the charged particles go through the detector, non-uniformity of magnetic field (NUMF) and wire sag, etc., have been carefully handled. This algorithm works well and the performance satisfies the physical requirements tested by the simulation data.

### 关键词

BESIII main drift chamber, track fitting algorithm, Kalman filter method

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