Simulation Status
24 Nov. 2009

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RIKEN

Separate Particle DSTs

Motivation:

1) Account for different $c\tau$ (μm)

D^0 : 122.9

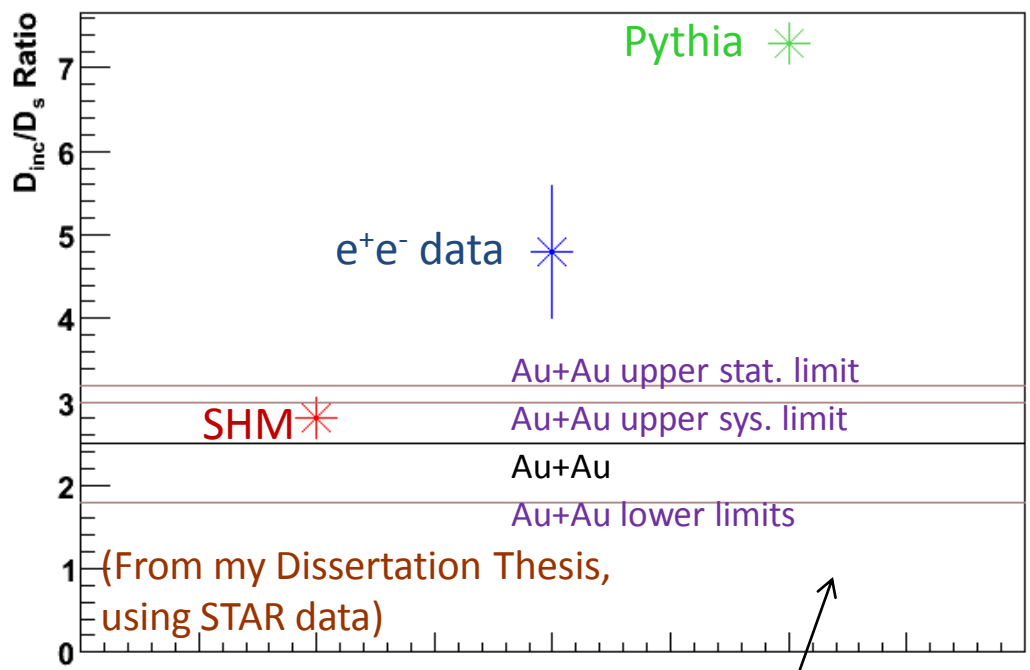
D : 311.8

D_s : 149.9

B : 491.1

B^0 : 457.2

B_s : 441

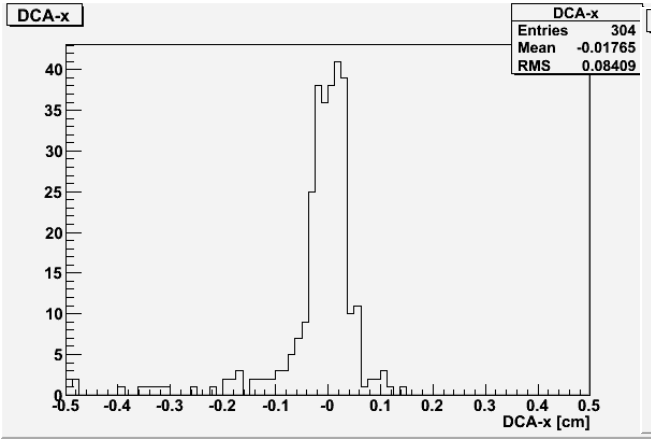


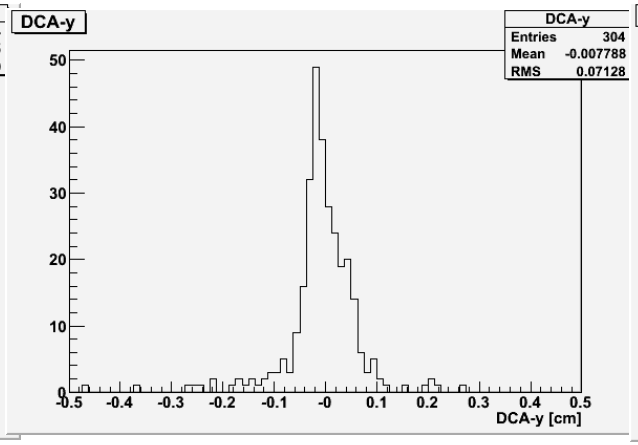
2) Increase Statistics

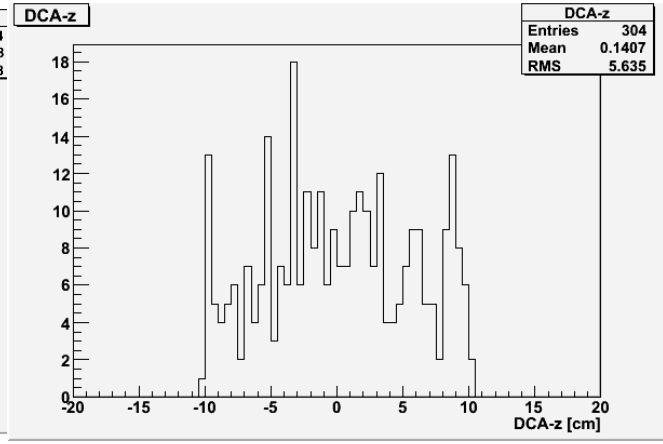
3) Take account of fact that Pythia may be getting ratios wrong, especially in heavy-ion collisions.

Status

- Jobs running, need few more days
- Z-DCA values look suspicious (Is this due to bad z-resolution or is it a bug?)







Rough Draft of JPS 2010 Abstract

March 20 – 23, 2010

English Translation:

The VTX detector for the PHENIX experiment at RHIC will improve tracking abilities. This will allow us to separate the electrons from the decays of charm and bottom mesons based on DCA results. I will make a presentation about VTX simulations. A “Blind Analysis” is being done in order to confirm PHENIX’s ability to separate charm and bottom.

Actual Abstract:

RHICのPHENIX実験にあるVTX検出器はトラッキング力を高める。VTXがあれば、DCAの結果でチャームとボトム中間子からの電子を分かれることができる。VTXのシミュレーション発表する。チャームとボトムを分かれることを確認するためにシミュレーションで「Blind Analysis」の解析をしている。