

***FAST SIMULATION MEETING***  
***17 April 2008***

# ***IFR fast simulation: Plans***

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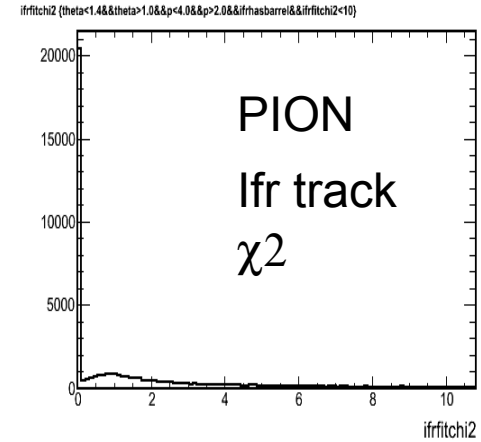
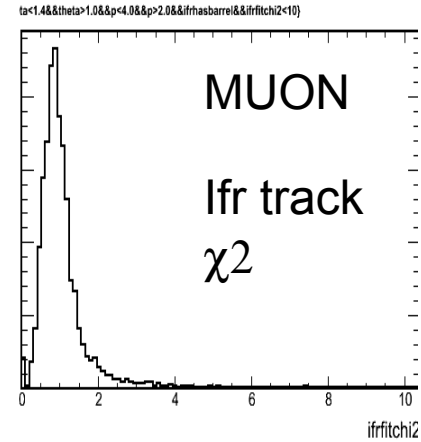
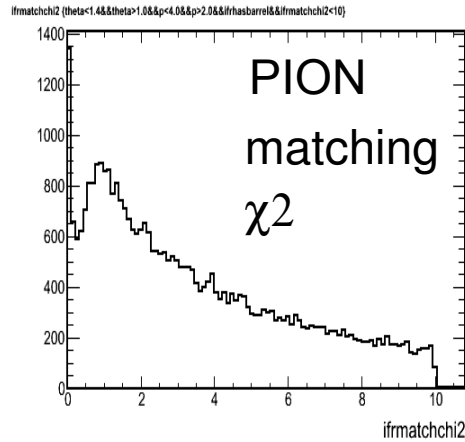
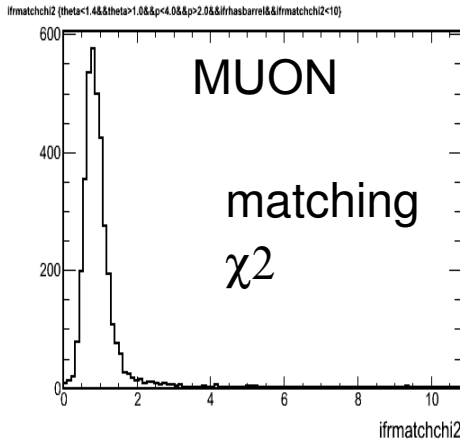
17 March 2008

# Plans

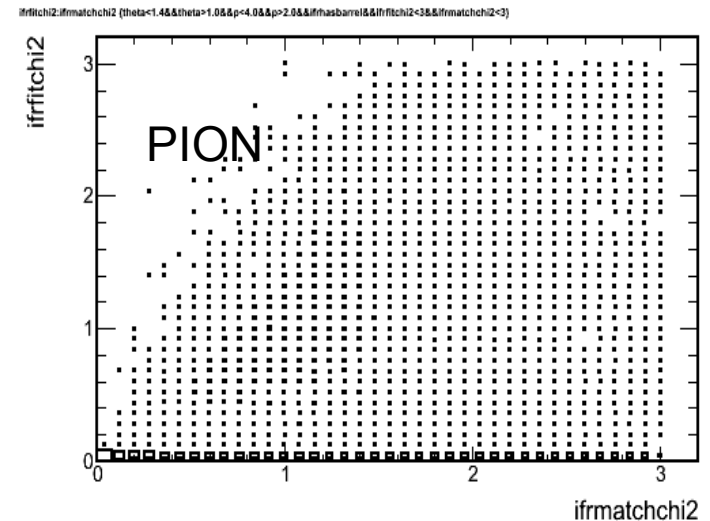
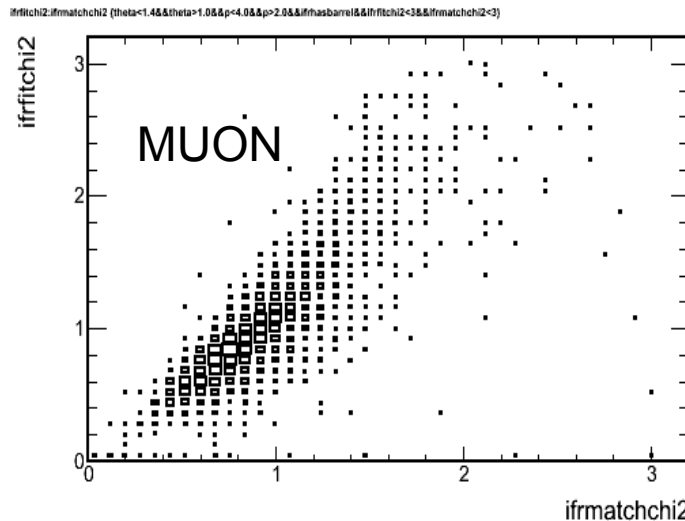
- **Start from the ntuple produced by the BaBar PID group (used to make the Pid tables):**
  - *Store the histograms of the relevant variables in a root file for each particle type,  $p$ , theta and phi;*
- **Add the parameterized quantities in PmcMicroAdapter.cc, hh**
  - *Read the root file in the beginJob*
  - *generate randomly the IFR relevant quantity*
  - *Fill the BtalfrQual quantity*
  - **Use PravdaMC for now.**
- *Implement a simple cut based selector and create muonLists*
- *Adjust the PDFs according to the CDR baseline, or other design*
  - *for examples: changes in the #layers, or in the #interaction lengths*

# Some examples

- Use clean samples of muons ( $\mu\mu\gamma$ ) and pions ( $\tau\tau$ ): select a particular bin, for ex. (barrel):  $\theta(57^\circ-80^\circ)$ ,  $p(2.0-4.0 \text{ GeV})$



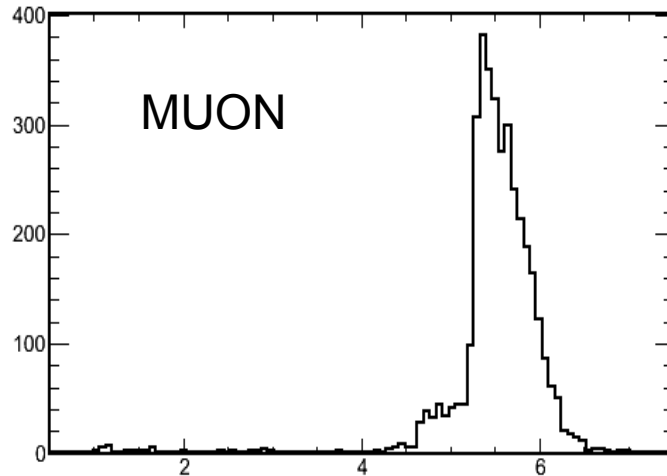
Take into account  
the correlations...



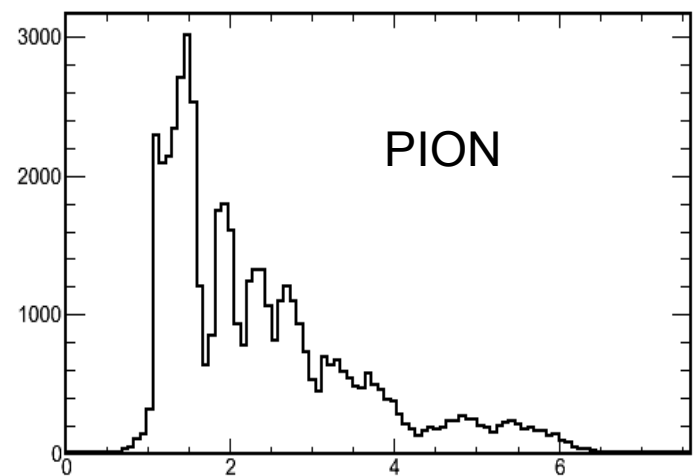
# Other examples: measured IntLenght

bin:  $\theta(57^\circ-80^\circ)$ ,  $p(2.0-4.0 \text{ GeV})$

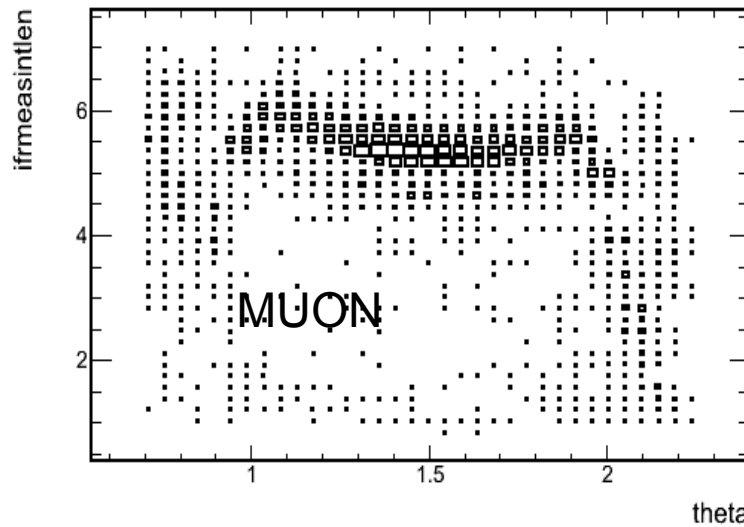
ifmeasintlen (theta<1.4&&theta>1.0&&p<4.0&&p>2.0&&ifrhasbarrel&&ifrmeasintlen<7)



ifmeasintlen (theta<1.4&&theta>1.0&&p<4.0&&p>2.0&&ifrhasbarrel&&ifrmeasintlen<7)



ifmeasintlen:theta {p<4.0&&p>2.0&&ifrhasbarrel&&ifrmeasintlen<7}



ifmeasintlen:theta {p<4.0&&p>2.0&&ifrhasbarrel&&ifrmeasintlen<7}

