Beam Properties from CDF/D0

- X and y beam positions, angles
- Sigmas as a function of z
  - "2 track" method
    - assumes x, y same
    - Factors out experimental resolution
  - From primary vertex fit
    - X and y separately
    - Need to deconvolute experimental resolution
- Online and offline
- www-bd.fnal.gov/sdahomepage/exp_luminosity/lum.html

Positions and Angles

- CDF
  - Available online as ACNET variables
  - In SDA
  - Offline values in CDF calibration database
- D0
  - Online in ACNET in 1-2 months (see slide)
  - Offline database under construction

Beam Size vs Z

- CDF
  - Offline soon to be part of alignment database
    - Issues with deconvolution of SVX resolution
    - Method for us to get information systematically
  - Online from SVT trigger
    - Can’t deconvolute beam width from SVT resolution
    - RMS after cuts, not a Gaussian fit
    - will publish anyway if we say so
    - Could possibly do “2 track method”

Beam Size vs Z

- D0
  - "Online" not trigger but online monitoring code
  - Developing a beam line database
  - Will investigate " 2 track" method
  - Will add sigmas vs z to online code
  - Very interested in CPMs