

Look-Up Based Track “Fitting”

Would like to use a table to get matrix and coefficients for linear equation

PROBLEM: Size of look up

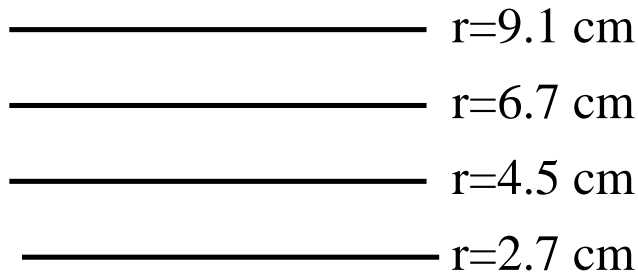
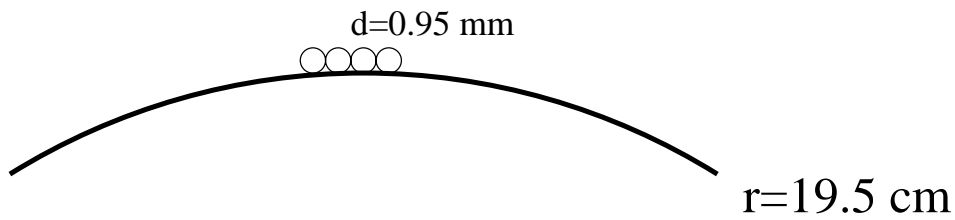
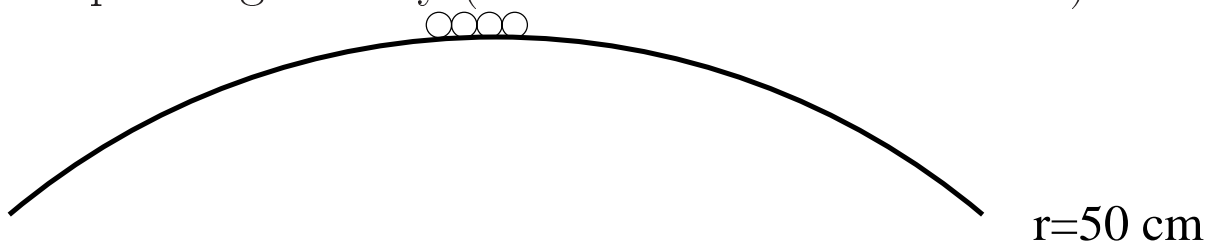
- 12 bits, H-layer
- 4+1 bits, A-layer
- 13 STT internal
 - 3 bits – Starting barrel
 - 3 bits – barrel ordering
 - 4 bits – sublayer pattern
 - 3 bits – skipped layer

30 bits \Rightarrow 1 Gaddr

Compress this?

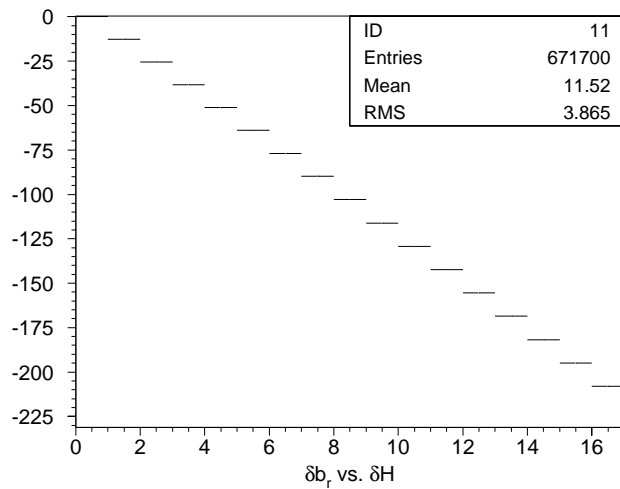
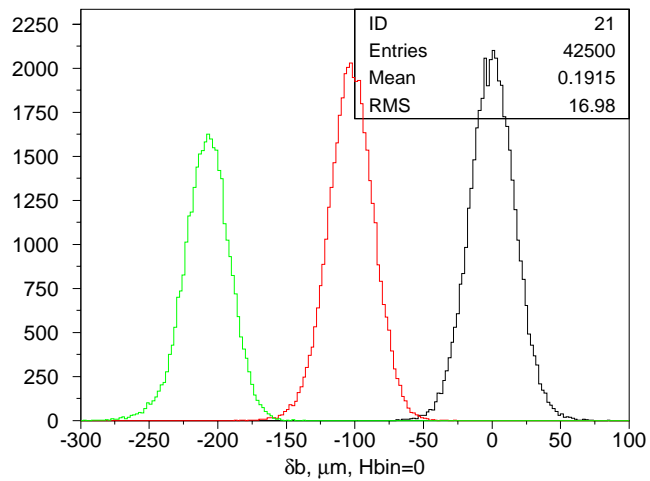
- Multiple A,H-layers per “super road”?
- Reduce STT “internal” selection

Test of CFT “super roads” for look up of matrix
Simplified geometry (almost have for real events)



Super Roads

Look at reconstructed parameters...



⇒ Looks reasonable, 8 bits H-layer, 0 bits A-layer

STT Internal Selection

- IF efficiency is high, could define towers and skip sublayers?
- IF int barrel-to-barrel assembly is sufficient in “radius” could drop
 - sublayer pattern
 - only 1 bit for starting barrel and 1 bit for transition

Query to Bill Cooper (1 yr. previous, no information)