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 ⇒ 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)