

# STT Simulation Status

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- What we Have

- Linearized Track Fit Approx

$$\phi(r) = b/r + \kappa r + \phi_0$$

- \* Will be used in STT processor

- Fit Si Hits  $\phi_i$  to this eqn

- \* Private versions of code to do this exist in: fortran, c

- » Meena, Phil, John

- \* Further approx's may be used in final STT

# Results & Plans

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- Fit is Basis for several DØ Notes
  - Uses GEANT → Trigger Ntuple
  - Physics Studies
  - STT Single Track Resolutions
    - \*  $P_T$ , b, etc.
  - <http://www-d0.fnal.gov/~wahl/vtx.html>
- The Future:
  - Finalize Fitting Algorithm
    - \* Further approx's in fit
    - \* Multiple hits in road
  - c++ for I/O Data
    - \* Output data format still in flux
  - Final Hardware Design?
  - Looking for someone to Coordinate