

STT Simulation Status

H. Evans

Columbia University

- What we Have

- Linearized Track Fit Approx

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

- * Will be used in STT processor

- Fit Si Hits ϕ_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

- 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