CMS Upgrade – Tracker R&D

Goal: Track Trigger Electronics Project

Synergetic work on $\tau$ between Task A (Tracker) and Task F (Calorimeter)
Tracker Simulation Plan

■ Phase 1: Planning for pixel activities till 2013
  ■ Options for phase 1 upgrades
  ■ Milestones and time scale for Phase 1 LOI (~ mid-2009) and Phase 1 TDR (~ mid-2010)
  ■ Determine what is needed for upgrade simulations for Phase 1

■ Phase 2: Planning for activities till 2012
  ■ Options for phase 2 upgrades (whole tracker)
  ■ Milestones and time scale for Phase 2 LOI (~ mid-2010) and Phase 2 TDR (~ 2012)
  ■ Strategy and plan for Phase 2 tracking system layout studies and related plan for tracking performance and track trigger simulation studies

■ Plans for 2009 – First pass in May
A Baseline Geometry

Start with StrawB
Remove TEC
Add in extra layers
Extend Barrel Length
Long Barrel Designs
5k single muon (0-100 GeV)

Stacked Layers
Andrew W. Rose

Feb 18, 2009  CMS at TAMU