



Recent models in Mokka

Naming convention

- Model name = XXXYY_ZZtt where:
 - XXX = detector concept (LDC, SID, GLD)
 - YY = baseline:
 - 0 = Tesla TDR
 - 1 = LDC
 - ZZ = release number (serial)
 - tt = Details (Rp = Hcal RPC, Sc = HCal Scintillator, etc.)



00 = “Tesla baseline”

- Four models :
 - LDC00xx
 - LDC00_01xx
 - LDC00_02xx
 - LDC00_03xx
- (xx = Sc or Rp)

Tesla baseline

- Main parameters = almost the same as the last Tesla model “D12”:
 - Ecal with 30 X 1,4 mm + 10 X 4.2 mm for radiator W layers
 - Hcal with special end modules
 - Barrel halfZ = 2730 mm
 - TPC outer radius = 1690 mm
 - etc.

LDC baseline

- Three models :
 - LDC01xx
 - LDC01_01xx
 - LDC01_02xx
- (xx = Sc or Rp)

01 = “LDC baseline”

- Main parameters = first approach by Henri Videau for the LDC baseline :
 - Ecal with $20 \times 2,1$ mm and 10×4.2 mm for W layers
 - Hcal without rings
 - Barrel halfZ = 2200 mm
 - TPC outer radius = 1580 mm
 - etc.

Releases

- $_01$ = improvements on Hcal (fiber gap for scintillators) and yoke, strip LumiCal by Bogdan Pawlik
- $_02 = _01 +$
 - new TPC with limited step length (by Adrian Vogel)
 - yoke and muon chamber implemented by Predrag
 - A realistic vertex detector geometry (tube + vxd) based on TESLA TDR
 - Without LumiCal

Releases

- _03 (only for Tesla baseline) = _02 +
 - Cross angle configurations (changes in mask, tube, Field) and new LCal (all by Adrian Vogel)

New ready developments not yet released

- New Sit By Hengne Li (see slides and notes)
- New Ecal driver :
 - Si wafers and gaps (fiber + rings)
 - Faster end caps (without booleans)
- New Hcal driver :
 - 3 modules per stave
 - Rings as asked by Predrag

Open issues toward a new model

- What for?
- Agree on a new LDC model?
 - Wait for a ILD proposal?
 - To provide an up to date LDC model?
- What's the up to date LDC model?
- Who is implementing what?