

Babar framework:

- 1) the geometry is old, without the complete description of several detectors (=> a detector appears through its acceptance and resolution only)
- 2) the muon detector has a very old geometry and it has not been used. The Drell-Yan has been done in another framework, for the Physics Book
- 3) The tracking barrel is ideal with unrealistic pattern recognition
- 4) the same is true for the forward tracking
- 5) old geant4

Pandaroot:

a Formal description in chapter 3.6 of Physics Book

- 1) detailed description for MVD, completed with passive materials, pipe, magnet yoke, GEM, FTS, MDT...
- 2) realistic magnetic field mapping (with TOSCA)
- 3) realistic digitization extracted from experimental data, too for STT and MVD
- 4) realistic pattern recognition for the barrel
- 5) the same is true for forward tracking
- 6) updated version of geant4