Status and plans of the activity

M. Rama

12 March 08

Slide from the Feb. workshop

Development of PravdaMC

- Provide a working version of PravdaMC and write a preliminary version of a User Guide [Feb. workshop] ✓
- Identify a few areas where PravdaMC can be improved and organize the work [Feb. workshop] ✓
  - DIRC: maintain the pidmaps, include the parameterization of the Cher. angle - (D. Aston) -
  - IFR: include the parameterization of the IFR output. - (M. Rotondo) -
  - EMC: include parameterization of barrel and endcap model
- Release a complete version of the User Guide [mid March]
- Provide a working version of DIRC and IFR outputs [Elba]
- improve the parameterization of the EMC response [Summer]

Development of PravdaMC

- On track

- Provide a working version of PravdaMC and write a preliminary version of a User Guide [Feb. workshop] ✓
- Identify a few areas where PravdaMC can be improved and organize the work [Feb. workshop] ✓
  - DIRC: maintain the pidmaps, possibly include the parameterization of the Cher. angle - (D. Aston) -
  - IFR: include the parameterization of the IFR output. - (M. Rotondo) -
  - EMC: include parameterization of barrel and endcap model

- Release a complete version of the User Guide [mid March]
- Provide a working version of DIRC and IFR outputs [Elba]
- improve the parameterization of the EMC response [Summer]

Development of PravdaMC

- On track
- We will discuss it today

- Provide a working version of PravdaMC and write a preliminary version of a User Guide [Feb. workshop] ✓
- Identify a few areas where PravdaMC can be improved and organize the work [Feb. workshop] ✓
  - DIRC: maintain the pidmaps, possibly include the parameterization of the Cher. angle - (D. Aston) -
  - IFR: include the parameterization of the IFR output. - (M. Rotondo) -
  - EMC: include parameterization of barrel and endcap model

- Release a complete version of the User Guide [mid March]
- Provide a working version of DIRC and IFR outputs [Elba]
- improve the parameterization of the EMC response [Summer]

Slide from the Feb. workshop

Development of an alternative to TRACKERR tentative plan

- Take a decision on the feasibility of using CEPack in Bogus [mid March]
- Investigate the replacement of TRACKERR in PravdaMC with the algorithms in CEPack (may be preferable w.r.t. the previous option) [mid April]
- The next steps depend on the outcome of previous points
  - If TRACKERR is replaced by 'CEPack': perform an extensive validation to test if it meets the requirements. In that case release it. [Elba(?)]
  - Otherwise design a new tracking software. A detailed operational plan is being defined to be ready in case this scenario occurs. Additional dedicated manpower will be needed. [first results in Summer]

Slide from the Feb. workshop

Development of an alternative to TRACKERR tentative plan

- Take a decision on the feasibility of using CEPack in Bogus [mid March]
- Investigate the replacement of TRACKERR in PravdaMC with the algorithms in CEPack (may be preferable w.r.t. the previous option) [mid April]
- The next steps depend on the outcome of previous points
  - If TRACKERR is replaced by 'CEPack': perform an extensive validation to test if it meets the requirements. In that case release it. [Elba(?)]
  - Otherwise design a new tracking software. A detailed operational plan is being defined to be ready in case this scenario occurs. Additional dedicated manpower will be needed. [first results in Summer]

- CEPack has been abandoned

Slide from the Feb. workshop

Development of an alternative to TRACKERR
tentative plan

- New approach: exploit the track fitting algoritms used in Babar.
David will talk about this today.

- Otherwise design a new tracking software. A detailed operational plan is being defined to be ready in case this scenario occurs. Additional dedicated manpower will be needed.

[Elba] ~~[first results in Summer]~~

Proposed plan

- Start from PravdaMC to develop the Fast Simulation of SuperB (which eventually will be a completely different program)
- Replace TRACKERR with track fitting algorithms used in Babar
- Implement the response of DIRC, EMC and IFR in a parameterized way
  - From several discussions had so far it looks like it's not convenient to implement a non-parametric response of these systems, with the possible exception of EMC (Gflash)
  - Use the Babar data and/or the Babar Geant4 simulation and/or standalone detailed simulation to provide the parameterized response
- Evaluate the use of a geometry description interface compatible with the one used in the full simulation
- Make the simulation independent on the Babar framework

Most of these topics will be touched today

Proposed plan

I would like to hear your comments and criticisms.
Changing things later could be difficult if not impossible

- Two words on the PravdaMC User guide
  - The release of a new version is imminent
  - We'd like to use wiki at some point
  - In the meanwhile, check this temporary location
    http://www.slac.stanford.edu/~rama/temp/PravdaDOC