

New PravdaMC Sequence

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Problem we want to solve

- Need to put PacDetector and detector model into the Environment
- BtaCandidate object is not appropriate to
 - represent a true generated candidate
 - represent simulation of material effects and reconstruction effects
- Need to separate logically simulation of detector effects from fast-reconstruction

New Sequence

- PmcMakeBtaCandLists is replaced by two modules
 - PmcSimulate
 - PmcReconstruct
- PmcSimulate
 - Creates the PacDetector object in the ::beginJob, and stores it in the Environment
 - Loops on the list of Gtrack objects
 - Produces a list of PacSimTrack objects that represent the particles with material effects and stores it in the event

New Sequence (II)

- PmcReconstruct
 - Loops on the list of PacSimTrack
 - Applies sequentially operators derived from PmcOpReco
 - PmcOpPacReco produces a BtaCandidate and a TrkRecoTrk object for each PacSimTrack
 - Both lists are stored in the event for later use

Status

- Old functionality maintained
- New Sequence can be enabled setting
 - set SimInterface new
- Code compiles and links but still needs some bug fix to run properly (working on it)