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Author: S. Sharma

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PhD Project Status Update

Current Progress:

1. Set up and ran the simulation for a **AU-AU** collision using for the MUST geometry using the Cbmroot latest version .
2. Configured and ran the **SIS100_Muon_LMVM** setup and simulation using the standard MUST geometry **v26e** with the **Geant4** transport engine.
3. Generated collision events (1000) and successfully executed the run macro.
4. Updated the geometry configuration and related setup files. Currently working on reading the generated output files.
5. Some output branches are empty, so I am debugging the issue.
6. Working on identifying the correct analysis macro and updating the code to properly read the data and resolve the issue of histos that are coming empty.

Current Focus:

I have generated the first set of histograms from the simulation output. I am now working on the analysis macro to read the primary and secondary particles and extract information such as detector IDs, detector points, momentum etc. At the moment, some output branches are still coming out empty, so I am focusing on resolving that issue before moving on with the full analysis.