

Metadata In Output Rootfiles

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Analysis steps - Sources of Metadata

- Event Generator
- Beam Effects
- [Event Merging]
- Simulation
- [Event Merging]
- Digitization
- Reconstruction

I believe the framework is in place for persisting metadata through all steps.

What is not necessarily in place is the ability to add the metadata we want.

e.g.

- A parameter from the geometry xml which is useful to quickly check against downstream or confirm the input file matches.
- What settings were used in the reconstruction

Naming conventions

- Currently prefixes in metadata indicate what software produced the metadata
- This doesn't allow us to reliably access the metadata for use in code.
- Better would be to tag what step the metadata is associated with and have a field for the software which carried out that step.

How should we formalize the naming?

- Issue opened in afterburner

[Intrinsic metadata for ePIC workflow · Issue #31 · eic/afterburner](#)

Other comments

- The beam energy setting tag will not be the same as the beam energy – the precise beam energy of the input file may vary based on whether it was produced for the lattice or by a physics generator.