

GPU for histogramming – is it worth it in HEP?

Monday 28 July 2025 09:45 (15 minutes)

In this talk, we demonstrate a GPU-friendly extension to the FHist.jl. Within the analysis computing ecosystem, moving to GPU has been a steady trend, however, since any event we select almost always goes to a histogram, it would be a huge bottleneck if histogramming requires moving data GPU -> CPU.

We briefly discuss the design and implementation of GPU-backed histogram, and then show some benchmarks to inform the audience what kind of performance tradeoff is being made when you use GPU for histogramming.

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