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ATLAS
EXPERIMENT

BENCHMARKING WITH HEPSCORE23

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HEPScore23 BENCHMARK

- HepScore23 benchmark (<https://w3.hepix.org/benchmarking.html>) is used in WLCG for CPU benchmarking and accounting
- Replaced last year HepSpec06 benchmark used for many years
- HepScore23 uses 7 different HEP workflows captured into containers:
 - atlas-gen_sherpa, atlas-reco_mt, cms-gen-sim-run3, cms-reco-run3, lhcb-sim-run3, belle2-gen-sim-reco, alice-digi-reco-core-run3
- The HEPScore23 scores for the benchmarked servers are reported at [table link](#)
- No GPU benchmark so far, but planned to be included at some point
- One entry for BNL in table - curious about BNL farm value(s) - are these (publically) available ?

SIDE NOTE - NVIDIA GRACE HOPPER

- LBL ATLAS colleagues provided temporary access to a NVIDIA Grace Hopper from NVIDIA launchpad program
 - 72 core Arm Neoverse v2 + GH200 GPU
 - 96GB HBM3 GPU + 480 GB LPDDR5X shared memory
- Total HepScore23: 2318.75
- score/ncores: 32.2
- Top of the list of architectures in HEPsScore database for score/ncores
- See https://w3.hepik.org/benchmarking/scores_HS23.html