

Opportunistic resource usage at Argonne Facility for CMS (Talk Highlights)

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Talk Highlights

- CMS computing resources mainly consist of WLCG grid resources
- Largest scale computing facilities require more power-efficient architectures compared to traditional x86 server processors (IBM Power 7, Intel Xeon Phi, GPU's, etc)
- Significant motivation to enable CMS usage of such resources
- Working with Argonne Leadership Computing Facility (ALCF) to enable CMS use of computing resources there
- First steps towards functional job submission and transfers
- Running complete CMS software on Mira difficult due to architecture → targeting Cooley for now
- Work in progress to get NLO Monte Carlo generators running efficiently on ALCF resources, as well as improvements to underlying numerical integration and unweighting