Contribution ID: **20** Type: **not specified**

Purdue CMS Analysis Facility

Thursday 7 November 2024 11:00 (30 minutes)

The Purdue Analysis Facility (Purdue AF) is an advanced computational platform designed to support high energy physics (HEP) research at the CMS experiment. Based on a multi-tenant JupyterHub server deployed on a Kubernetes cluster, Purdue AF leverages the resources of the Purdue CMS Tier-2 computing center to provide scalable, interactive environments for HEP workflows. It supports a full HEP analysis software stack, offers a variety of storage and data access solutions, and integrates modern scale-out tools like Dask Gateway. Since its first deployment in 2023, Purdue AF has been instrumental in numerous published analyses, workshops, and tutorials. We will present the Purdue AF architecture and describe its common use patterns in CMS analyses.

Desired slot length

15-20

Speaker release

Yes

Authors: KONDRATYEV, Dmitry (Purdue University (US)); NEUMEISTER, Norbert (Purdue University (US)); PIPEROV, Stefan (Purdue University (US))

Presenter: KONDRATYEV, Dmitry (Purdue University (US))

Session Classification: Operating systems, clouds, virtualisation, grids

Track Classification: Operating Systems, Cloud & Virtualisation, Grids