

HSF Analysis Facilities Forum Kick-off Meeting

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The Analysis Facilities (AF) Forum is a new [Activity Area](#) within the HEP Software Foundation

The intent of today's kick-off meeting is to

- I. introduce the AF Forum and its Coordinators
- II. host presentations on a sampling of topics from those working on AFs
- III. provide a platform for community input on items such as practicalities of organization and goals for the AF Forum

All participants are required to follow the Code-of-Conduct found [here](#) 2

Overview

Analysis Facilities (AF) Forum provides a community platform for those interested in contributing to the development of analysis facilities for use by HEP experiments, serving as a space to develop and exchange ideas.

- including ideas from users for functionality to support HEP data analysis, specification and planning of the facilities themselves, and technical developments needed to realize AFs.
- HEP experiments have internal processes for developing and deploying AFs; this forum is intended to support and strengthen those efforts through sharing of ideas and developments.
- The forum collaborates with related [HSF Working Groups](#), such as the [Data Analysis Working Group](#) and the [PyHEP Working Group](#), and with projects such as [WLCG](#).

The development of future analysis facilities is of great interest to the HEP community, with considerable recent progress. There are numerous ongoing efforts to stand up AFs that utilize new tools and techniques to help make data analysis tasks easier, more performant, and more reproducible.

Inception, Process and Coordinators

The idea of an AF Forum was proposed during the **Future Analysis Systems and Facilities workshop** in 2020 where the need for a platform for those working toward analysis facilities within HEP experiments to develop and exchange ideas was identified.

A proposal to establish to the AF Forum as a new HSF Activity Area was put forward to the HSF Coordination Team and approved on 3 February, 2022

The current AF Forum Coordinators are:

[Diego Ciangottini](#) (CMS)



[Alessandra Forti](#) (ATLAS)



[Lukas Heinrich](#) (ATLAS)



[Nicole Skidmore](#) (LHCb)



Thanks to each for dedicating their time to coordinate this important

What is an Analysis Facility?

It is important to define the focal point of the forum and its scope.

We loosely define an Analysis Facility as

the infrastructure and services that provide integrated data, software and computational resources to execute one or more elements of an analysis workflow. These resources are shared among members of a virtual organization and supported by that organization.

The AF definition will evolve with the forum, informed by our discussions in this kick-off and regular AF Forum meetings where this could be a dedicated topic for discussion.

Timetable (I)

Welcome and Overview (10')	Mark Neubauer
	09:00 - 09:10
Introduction to the AF Forum (20+10')	Alessandra Forti et al. 
	09:10 - 09:40
AFs in the context of the IRIS-HEP AGC (10+5')	Alexander Held et al.
	09:40 - 09:55
DESY NAF (15+5')	Christian Voss et al.
	09:55 - 10:15
Break	
	10:15 - 10:25

[Google doc](#) for “Live Notes” can be found on the meeting main Indico page

Timetable (II)

SWAN over Spark and HTCondor at CERN (15+5')	<i>Enric Tejedor Saavedra</i> 10:25 - 10:45
US.CMS analysis facilities: coffea-casa AF, EAF and others (15+5')	<i>Lindsey Gray</i> 10:45 - 11:05
Distributed Dask-based national facility at INFN (15+5')	<i>Mirco Tracolli</i> 11:05 - 11:25
AF activities in LHCb (15+5')	<i>Donatella Lucchesi</i> 11:25 - 11:45
Break	11:45 - 11:55

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Timetable (III)

AF activities in DOE multi-purpose computing centers (25+5')

Burt Holzman et al.

11:55 - 12:25

Analysis on Cloud Facilities (15+5)

Fernando Harald Barreiro Megino

12:25 - 12:45

A kubernetes-based AF at UChicago (10+5')

Fengping Hu et al.

12:45 - 13:05

Distributing Software Ready for Production (15+5')

Brian Hua Lin

13:05 - 13:25

AF definition, Snowmass WPs, AF Forum practicalities (e.g. meeting frequency).: Discussion

13:25 - 13:55

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