Interactive Analysis Facility Project for DUNE

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DUNE-Canada resources

2021 Resources for Research Groups (RRG) competition

HPC allocations

- 100 TB of dCache storage on the ndc-uvic system

Cloud allocations

- 300 VCPU years on the arbutus-compute-cloud system
- 2,250 GB of RAM on the arbutus-compute-cloud system
- 50 TB of cloud object storage on the arbutus-compute-cloud system

Availability: April 1, 2021 until March 31, 2022

Goals

Experimental

Rethink how analyses are done in ProtoDUNE

Try different models / analysis system tools

Interactivity

Use of Jupyter notebooks for end-of-chain analysis steps

Auto-completion on custom-designed methods

Efficiency

Spack / ServiceX for rapid response

Alleviating the users on a tedious setup (batch job ‘babysitting’) to rather “focus on the physics”

Partners / network / expertise

IRIS-HEP

Institute for Research and Innovation in Software for High Energy Physics (IRIS-HEP)
https://iris-hep.org/

Cabinetry (IRIS-HEP project)

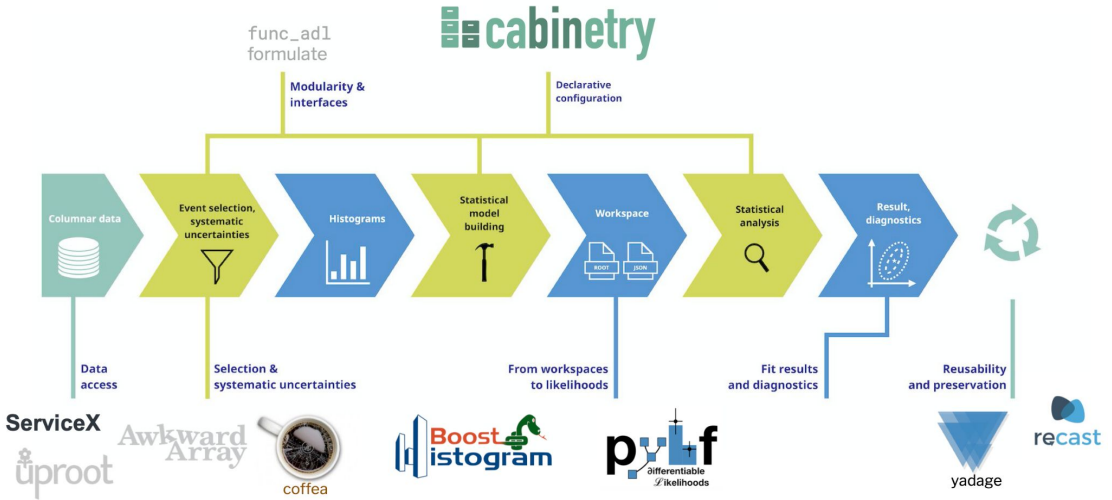
https://iris-hep.org/projects/cabinetry.html

Coffea

Columnar computing using big data technology
https://github.com/CoffeaTeam/

More…

Workshop on Future Analysis Systems and Facilities (October 2020)



GDoc meeting notes