# Analysis Preservation Mini-bootcamp

Sam Meehan, Lukas Heinrich and (maybe/hopefully) Savannah Thais 16 September 2019

## **Ideas**

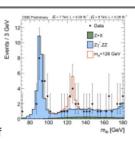
### Goal #1: Educational Aim

- Analysis preservation is/should become more important to the community
- This would seem to fall under some part of the IRIS-HEP mandate

### Goal #2 : Logistical Aim

- Can we reuse modules in a plug and play manner with SWC layout (i.e. <u>like the Git one</u>)?
- How "inter-experimental" can we create our training sessions?
  - If the timescale is too short, then we would make this an "ATLAS only" focused event but develop the materials just as well

IRIS-HEP will serve as an active center for software R&D, function as an intellectual hub for the larger community-wide software R&D efforts, and transform the operational services required to ensure the success of the HL-LHC scientific program. Three high-impact R&D areas will leverage the talents of the U.S. university community:



- development of innovative algorithms for data reconstruction and triggering;
- development of highly performant analysis systems that reduce `time-to-insight' and maximize the HL-LHC physics potential; and
- development of data organization, management and access systems for the community's upcoming Exabyte era.

# **Proposal**

- 2 day bootcamp at CERN
  - Day 1: Docker and containerization
  - Evening 1: Organized bootcamp dinner
    - Makes this a "real thing" with presence/commitment to being there
  - Day 2 : Yadage and workflows
- Format
  - Mornings: Experiment agnostic
    - Focused on toy MC to ensure no collaboration issues?
  - Afternoons: Experiment specific
    - Limited to ATLAS/CMS to keep scope narrow for first attempt
- Audience
  - Assumptions
    - They are proficient in python, c++, and Git (e.g. rebasing, detached heads, submodules,
      CI/CD) → Develop a HEP-centric SWC for Git to ensure certain skills are in place
    - They know how a standard analysis workflow is pieced together
  - Limit to 30 people → 6 instructors
- Cost: 1000 CHF will allow for refreshments and dinner (food) would be covered

# **Visually**

- A lot of content already exists and can be extracted from <u>August LBNL event</u>
  - Thursday morning → Day 1 morning (basically copy/paste but with some smoothing)
  - Thursday afternoon → Day 2 morning (requires considerable reworking but is a solid starting point)

