

# General concerns about software (for discussion)

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# Why do we need a Common SW

- Simply because if not it is really really hard to collaborate and really really painful to compare results
- If we have a common software
  - We have a common language (Code analysis and formatting) -> Huge gain of time and FTE optimisation
  - We have a common data format -> Combination!!!
  - We benefit from each other developments
    - Detectors in common format, can be exchanged from one concept to another
  - We have access to common tools to facilitate our life:
    - Testing & Continuous Integration
    - Packaging, Deployment, Software distribution
    - Batch Job Submission
    - Data storage
    - Documentation

# Full Sim of Full vs Part of Detectors

- Having a full  $4\pi$  implementation of the detectors in full simulation is of course the final goal
- But one can not use those fully simulated detectors w/o proper reconstructions, calibrations etc...
- Then it might be better to focus effort on specific part of complex detectors first in order to develop the needed reconstruction algorithms to assess the performances
- Then go to full concept
- But of course if we had unlimited resources we should do full detectors immediately

# Performance

- With a common software we also use common algorithms and scripts for plotting the performance
- It would be good to write a clear preliminary list of common performance plots we may want to achieve