



# Goals of the FF Detector WG for EIC@IP6

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EIC@IP6 Far-Forward WG Meeting

5/17/2021

# Administrative

- EIC@IP6 Far-Forward Conveners
  - Alex Jentsch ([ajentsch@bnl.gov](mailto:ajentsch@bnl.gov))
  - John Arrington ([jarrington@lbl.gov](mailto:jarrington@lbl.gov))
- Weekly meetings unless there are not updates on a particular week, or for a holiday (i.e. May 31<sup>st</sup> – Memorial Day).
  - **Meetings will be on Mondays @ 1:30pm EDT.**
  - Slides will be stored on the Indico (<https://indico.bnl.gov/category/370/>)
- If you have a topic you'd like to make a presentation on, simply email us and we will put you on the schedule for the next meeting.
- If you haven't already, please join the mailing list:  
<https://lists.bnl.gov/mailman/listinfo/eic-ip6-det-fwd-l>

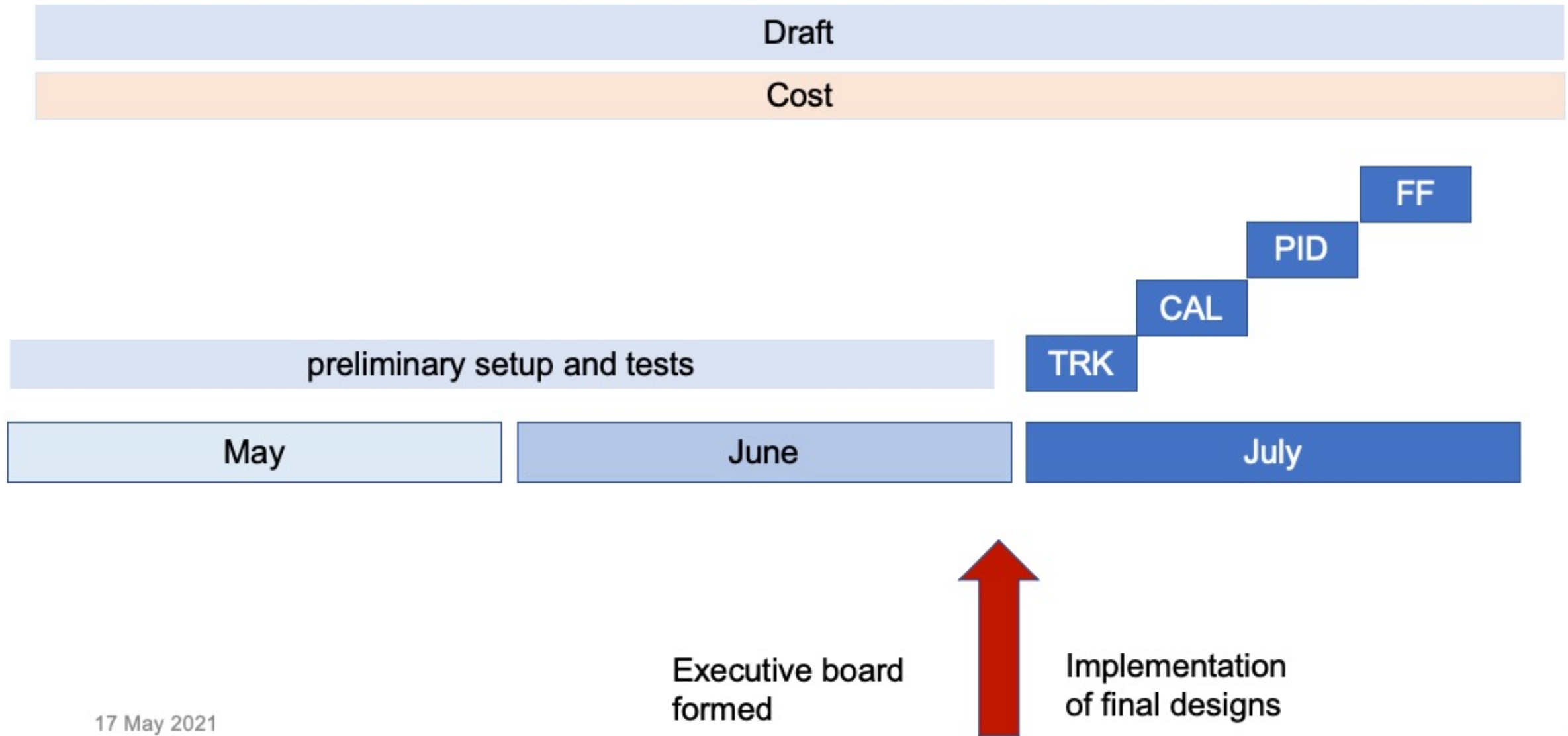
# General Goal

- Produce a solid proposal!
  - Also lay the groundwork for studies that will naturally be beneficial to the TDR and CD-2 process.
- This effort must be much more focused than the Yellow Report. Choices need to be made that we can defend on the basis of performance, cost, and integration.
- We have *very* limited space in the proposal, and limited time to run simulations.
  - We need to coordinate simulation work, and decide on just a few (2-3) relevant performance plots to include.
- The FF region is a bit of a unicorn – most central detector aspects have little impact on design, aside from DAQ.

# Specific Goals

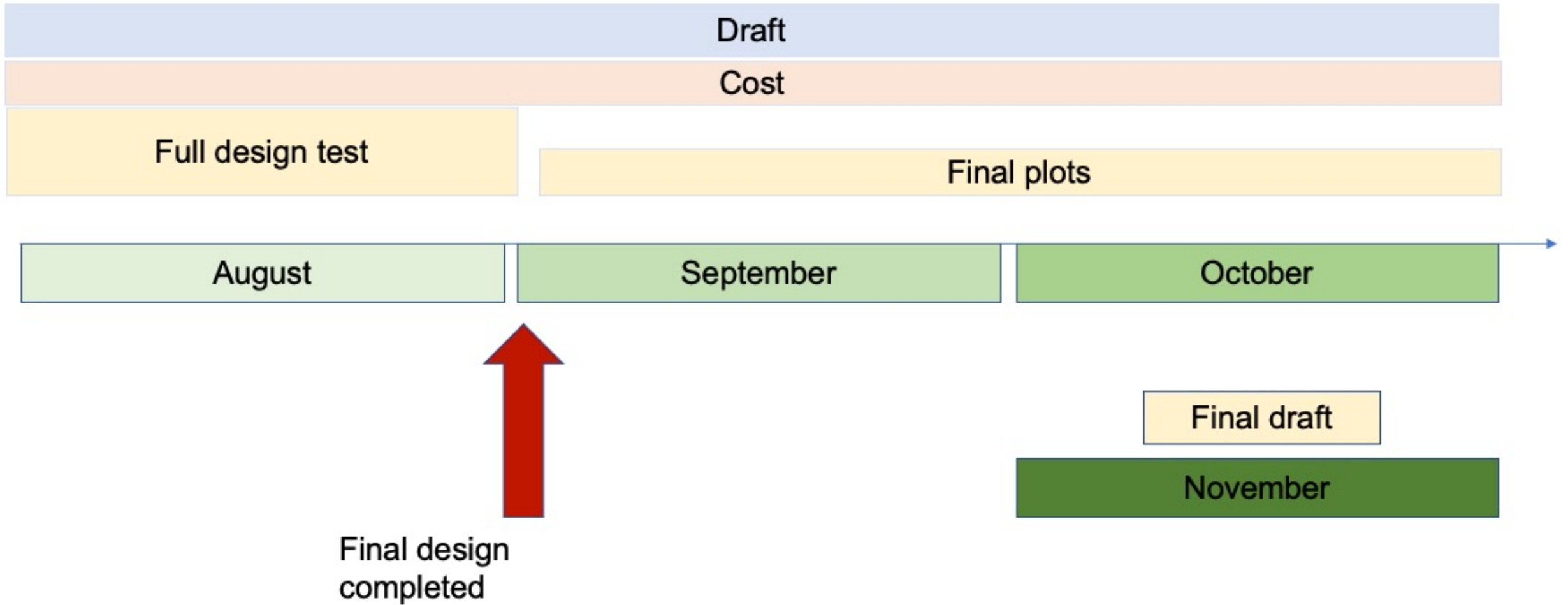
- **Choose technology for the far-forward detector subsystems.**
  - No more than two options.
  - Must be able to provide information on costing and integration.
- **Estimate services, supports, and active materials.**
  - What support structures are needed to hold the detectors?
  - Cabling, readout, cooling, etc.
- **Integrate into global simulation model and demonstrate that the subsystems interact well.**
  - The software team will help with this – but essentially, make sure your work can be included in the global simulation.
  - Currently used frameworks will continue to be used (e.g. Fun4All, EicRoot, etc.).
  - Key studies from the YR will be identified to demonstrate performance of fully-integrated system.
- **Provide reasonable estimates of cost.**
  - This will greatly benefit from people who have past experience building subsystems.

# Timeline



17 May 2021

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# Takeaways

- The timeline is aggressive, and we have limited resources.
  - Need to be strategic with simulations, and realistic with estimates.
- You do not need to run simulations to contribute!
  - If you have experience building or maintaining a subsystem from a past or present effort, consider making a presentation about a topic that could be useful.
    - Cooling, readout, timing, lessons learned, what went wrong and is useful to consider for the next generation of experiments, etc.
- Lots of work has been done in the YR era – let's build on this foundation and the shared experience of the group!
- Questions?

