The Framework in its Organizational Context

Ken Herner June 2024 Frameworks Workshop 27 June 2024





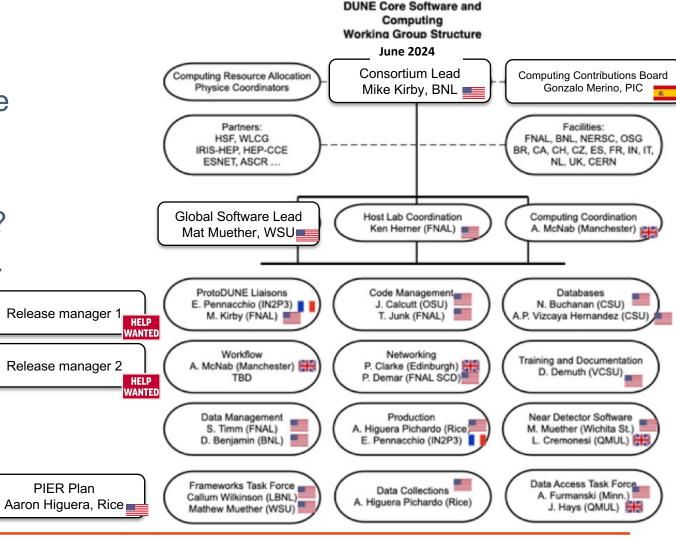
Organizational Structure Reminders

- This talk is about where the framework effort fits into the computing organization(s)
- There's a consortium portion, a DUNE-US portion, developer portion, ...
- Let's make some same of this

K. Herner I Title

Computing Consortium Context

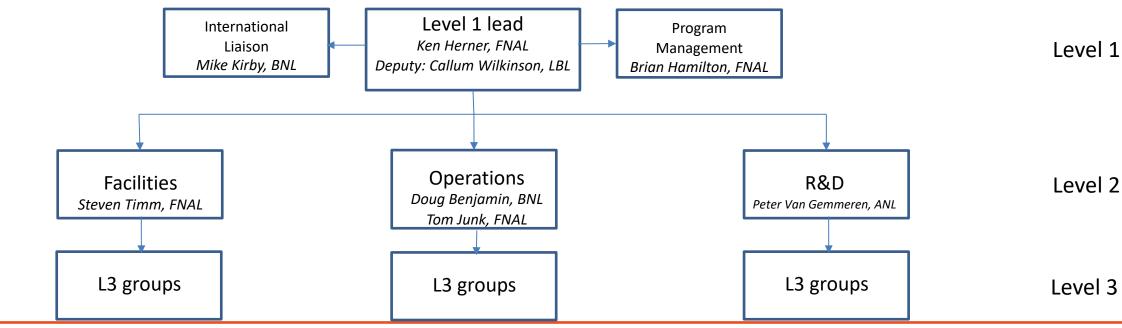
- So far everything's been through the Task Force on the Consortium Side
- Need to determine how the Task Force will morph into a longer-term body. Stakeholders group?
- Separate box? Under global software?
- Ideally have that all sorted out no later than October for the next LBNC meeting





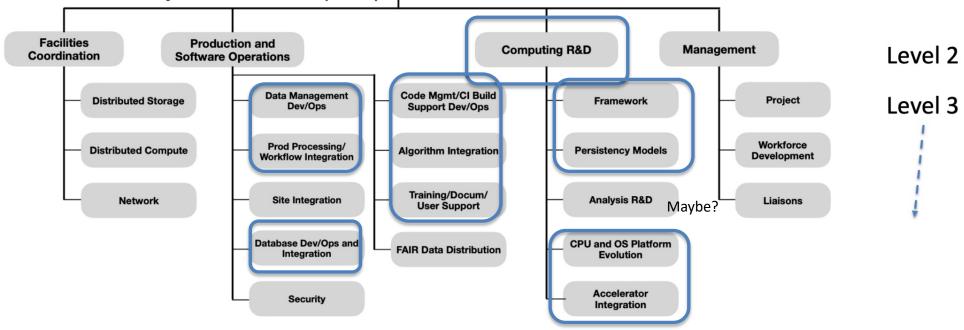
DUNE-US Context

- Consortium sets the direction and says what work we need to do
- DUNE-US (and other national groups) set the scope of national effort and declare which work packages they will take on, and interface with the funding agencies. The US has declared the framework to be a national deliverable
- Development will proceed under the R&D area (Peter Van Gemmeren, ANL). Longer term: will likely move to Operations. R&D serves as bridge to dev efforts and wider collaboration and coordinates the non-FW L3 work to make a coherent whole



DUNE-US Context (2)

- Framework development has its own L3 area (Kyle Knoepfel, FNAL)
- However the other R&D areas are tightly linked
- Framework mostly core dev team now, **but must expand** in the future to cover algorithm interfaces, testing, feedback, etc. Lots of room for involvement from entire collaboration in these areas! (And will need some structure to coordinate that, possibly a trans-national one). Expect to be able to fund more such effort in time (at least to US institutions)
- Framework will naturally touch on multiple operations areas as well.



Idealized MO

- First, devs take requirements, make design doc, doc is reviewed (internally and externally), move to implementation
- Framework devs have expressed preference for more releases with smaller changes between type of model
- Devs present prototypes to DUNE stakeholders group (whatever form it takes) though DUNE-US
- DUNE tests, plugs in detector algorithms, provides feedback
- Wash, rinse, repeat as needed

Conclusions

- Hopefully this explains a bit more about the Who and Where
- US is making core FW a national deliverable
 - Core dev team is primarily FNAL comp professionals now, but things can and do change
- Much effort will be needed in testing, feedback, det algorithm integration
- Organizational To Dos
 - Need to think about how Task Force structure will evolve in the Consortium
 - Think about long-term transition plan from R&D to Ops
 - LBNC would like a report/timeline in October
- Nothing much can happen until requirements are done- let's focus there this week

Backup: Framework-related L3s in R&D

- Framework core dev: Kyle Knoepfel, FNAL
- Persistency: Barnali Chowdhury, ANL
- Accelerator Integration: Meghna Bhattacharya (FNAL), Amit Bashyal (ANL)
- Will have additional effort from future ANL postdoc on RNTuple studies