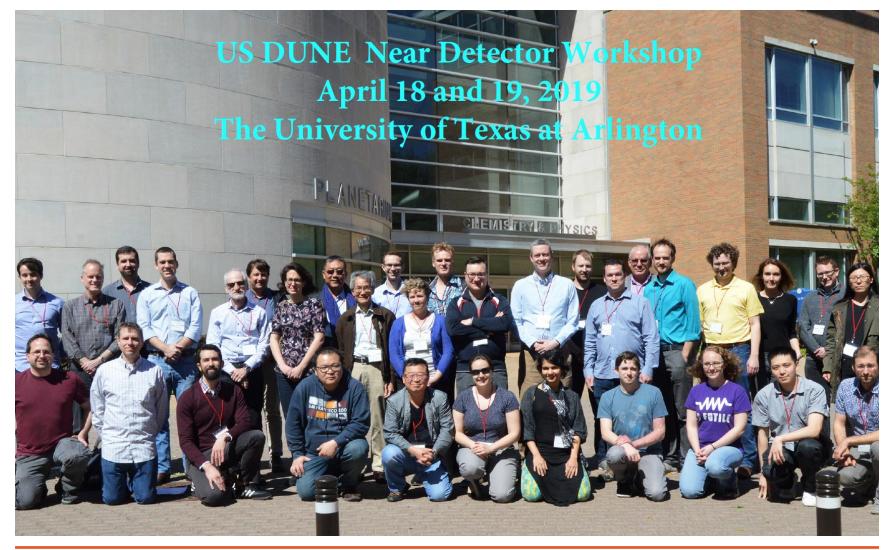
UTA US DUNE ND meeting





1 April-19-2019 Tim Bolton, DUNE US Deputy Project Director

Thank-you

- Thank-you to Hiro, Kendall, and Marvin for organizing the EOI process for US ND efforts and getting this process started.
- A big thanks to Jae, Jonathan, the UTA Physics Department, and the University of Texas-Arlington for hosting the meeting.
- Thanks to Maxine Hronek for her help with Fermilab Indico.
- And a special thanks to UTA student volunteers for making the meeting run smoothly.

Management: we're really serious

- We have activated the US DUNE WBS level 2 task for the Near Detector.
- We have asked Dan Dwyer of Lawrence Berkeley Lab to serve as the L2 manager for US Near Detector contributions, and we're happy to report that Dan has agreed to take on the job.
- Dan will organize the project (L3 elements, etc.) based on an initial model where we build out a US effort starting from US support for Argon Cube.
- Dan will need your help!
- DUNE Technical Coordination also anticipates bringing on a ND Project Engineer in the very near future.



Milestones (I)

- April 18-19 UTA meeting: initial scope discussions.
 - How would each entire task, international and US, break into components?
 - What are <u>realistic</u> candidate US components?
 - How do they leverage international contributions?
 - What US groups are interested in contributing?
 - What are the capabilities of the groups?
 - What's missing from the US side?
 - What work over the summer needs to be done?
- We're hoping that all task groups leave UTA with at least a "plan for a plan".

We're off to a good start

- Interesting technical issues remain
 - ArCube: "the efficiency hole"; how to fill it? MCS? Module geometry? Why 1 kV/cm?
 - HPgArTPC: Is 5? 2? ... bar possible? Field cage? Light detection?
 - 3DST-S: TPC elements? Interacting magnetic fields? Maintaining
 <1 ns timing through system.
 - PRISM: underselling potential of weakening model dependence?
- All tasks need more definitions
 - What are the parts?
 - What are the US parts?
 - Can the US groups execute the US parts at a technical level?
- Later: schedule, scope, costs,....



Milestones (II)

- May collaboration meeting/DUNE ND workshop.
 - Progress reports.
- Summer 2019: develop US proposal at task level.
 - Mid-summer workshop?
- Dan will report on US ND to the DOE Independent Project Review in late July.
- Fall collaboration meeting 2019: present task-level proposals.
- Fall-Winter 2019: consolidate task-level proposals into integrated US proposal.
- December 2019: US DUNE Project must define and report a total project cost (TPC) for all US DUNE activities, including ND, at the Far Detector CD-2 review. The US ND effort will have to be baselined to first approximation.

KANSAS STATE

