Update on ALICE's resource needs for 2025

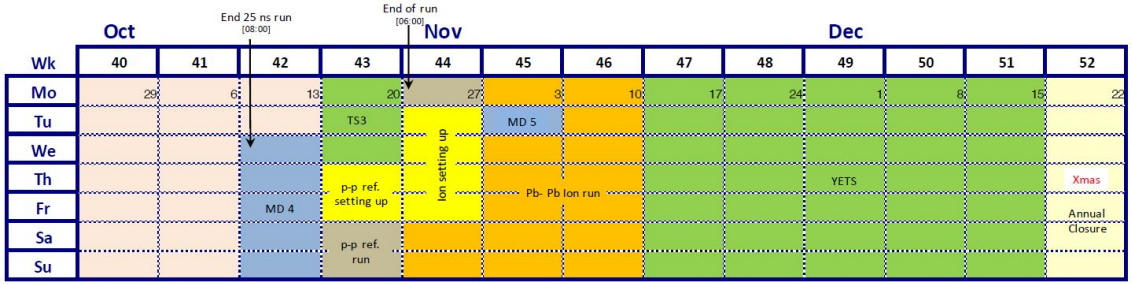
Stefano Piano, Irakli Chakaberia

INFN TRIESTE

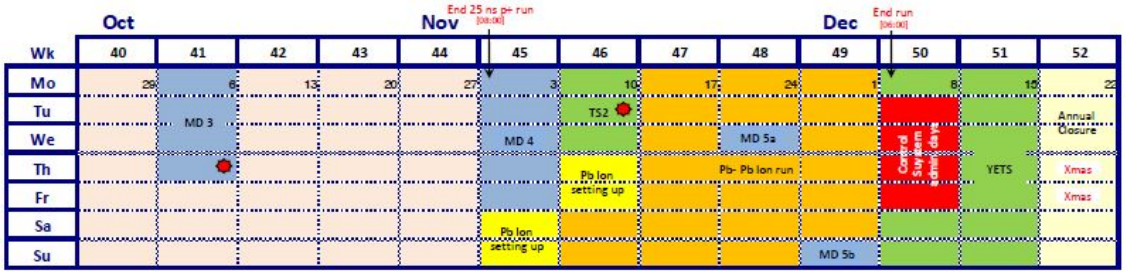
BERKELEY LAB

Update of the luminosity estimates for 2025

Scenario considered for the 2025 resource requests in April 2024:



Schedule currently planned for 2025:



In addition to the increased 2024+2025 pp days, significantly higher expected luminosity for Pb-Pb collisions in 2025:

- Excellent machine performance in 2024
- No pp reference run planned
- 21 physics days for Pb-Pb collisions, up from the previously planned 15 days
- Integrated luminosity of 3/nb expected over the 21 days, compared to 1.8/nb in 15 days previously considered

Update on ALICE resource needs for 2025

- Expected 111 PB of data to be archived in 2025, plus 7 PB for the Run 2 archival campaign, which is essential for freeing up disk space, totaling 118 PB
- Available tape space in 2025:
  - 337 PB (2025 pledge) - 241 PB (projected tape usage as of April 2025) = 96 PB
- A shortfall of 22 PB in tape space needs to be distributed according to the computing model:
  - 22 PB x 2/3 = 14.5 PB at T0
  - 22 PB x 1/3 = 7.5 PB at T1s
- The additional 22 PB of tape will be needed at the end of the HI run on December 8th
- They can be considered as an advance on the 2026 pledges, as the overall 2026 requests will incorporate this additional requirement from 2025