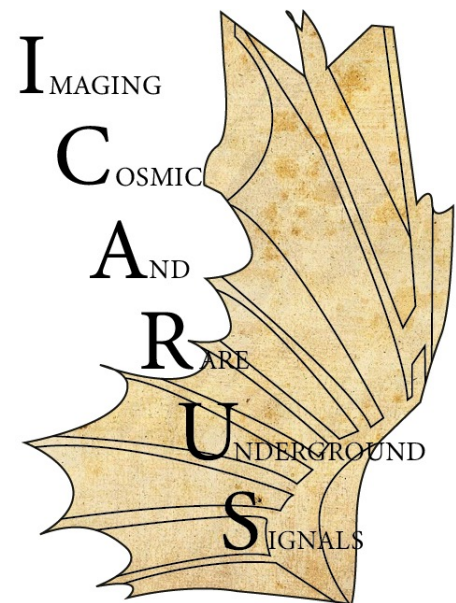


Status of ICARUS Run Operations



Ivan Caro Terrazas and Matteo Vicenzi
On behalf of the ICARUS Collaboration

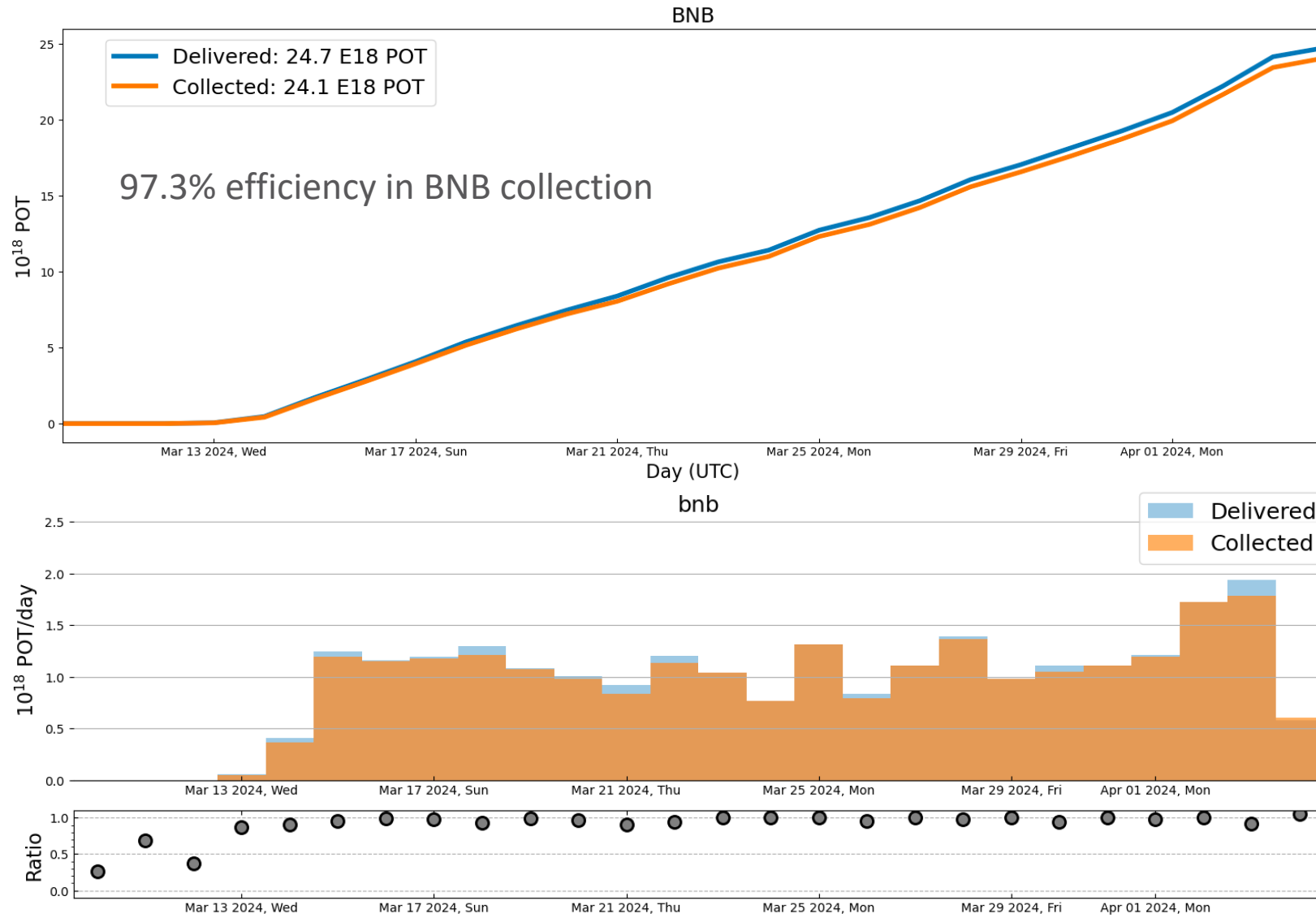
Fermilab Proton PMG Meeting

04-Apr-2024

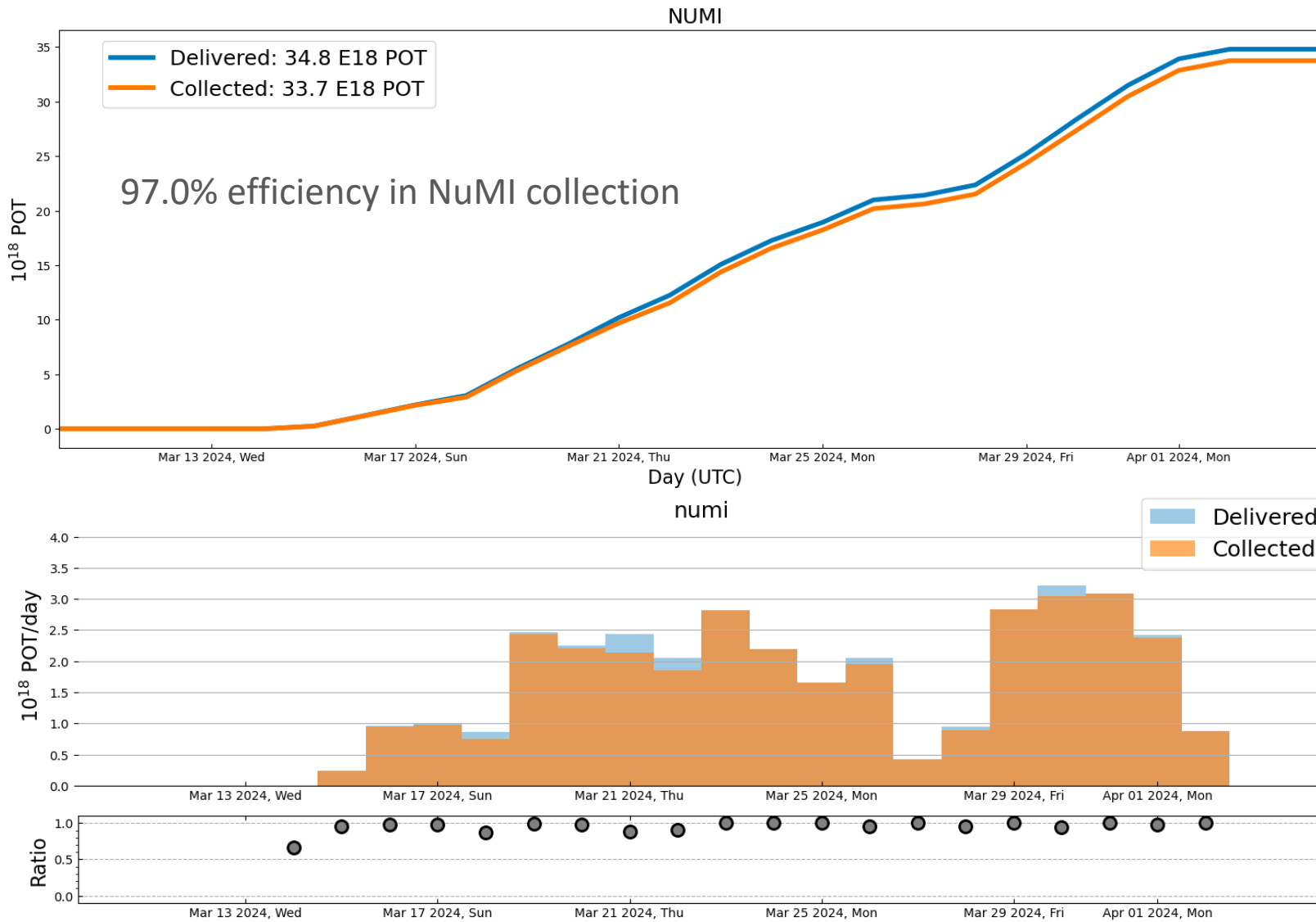


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UNIVERSITY**

ICARUS Run3 POT Plots - BNB



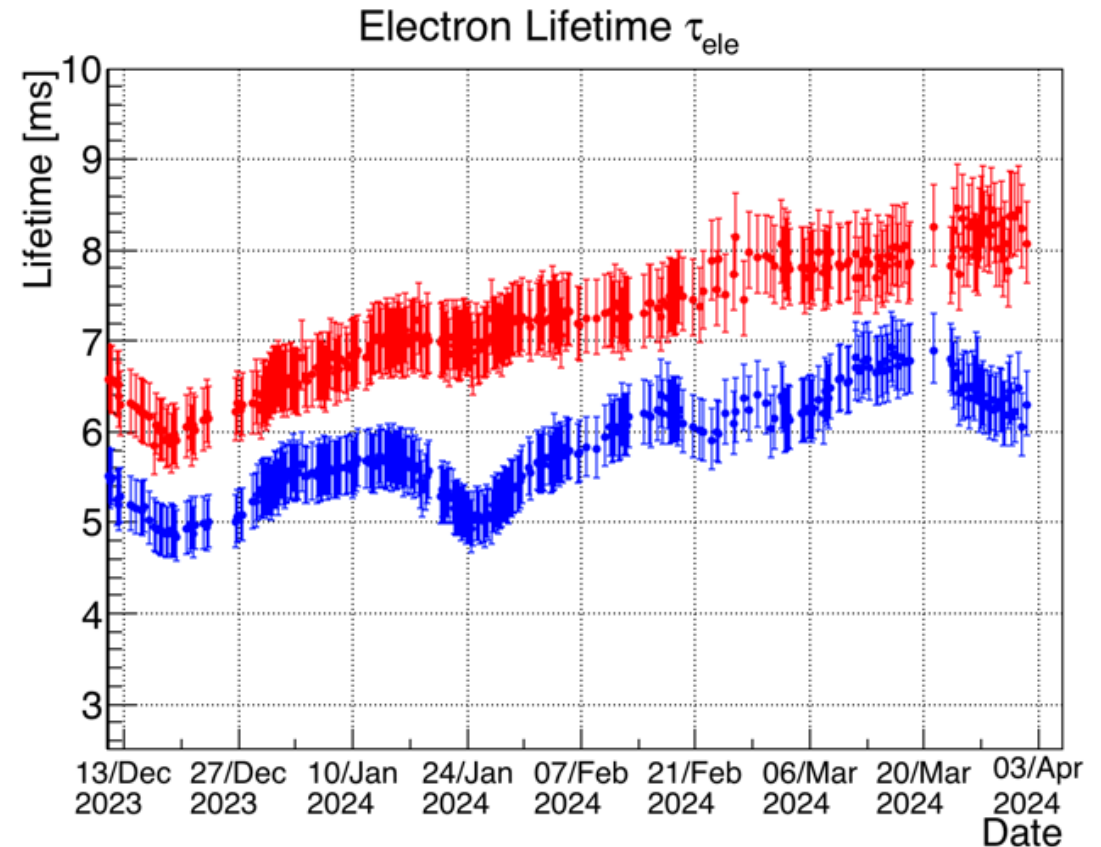
ICARUS Run3 POT Plots - NuMI



ICARUS Detector Purity



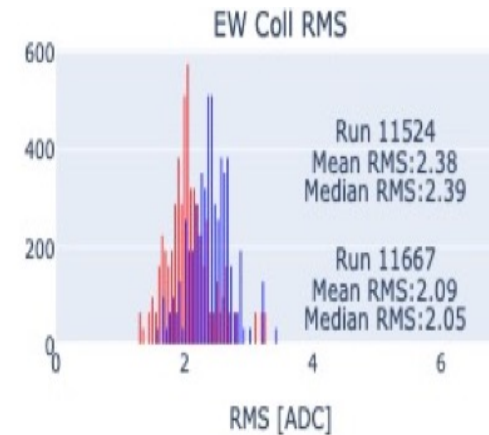
- The detector purity, measured using the value of the electron lifetime is pretty stable since the last PMG meeting
 - Very high across the entire Run3 period!
- Last measurement on Apr 01, 11:53 AM CT
 - West: ~8.10 ms
 - East: ~6.30 ms
- Electron lifetime is expected to stabilize



TPC Noise Reduction



- Campaign to install Chebyshev low-pass filters on Collection and second induction readout boards carried out
 - First induction readout boards had these filters installed in 2022
- As a result, the coherent noise is reduced by 15-20 %



Without Filter

With Filter



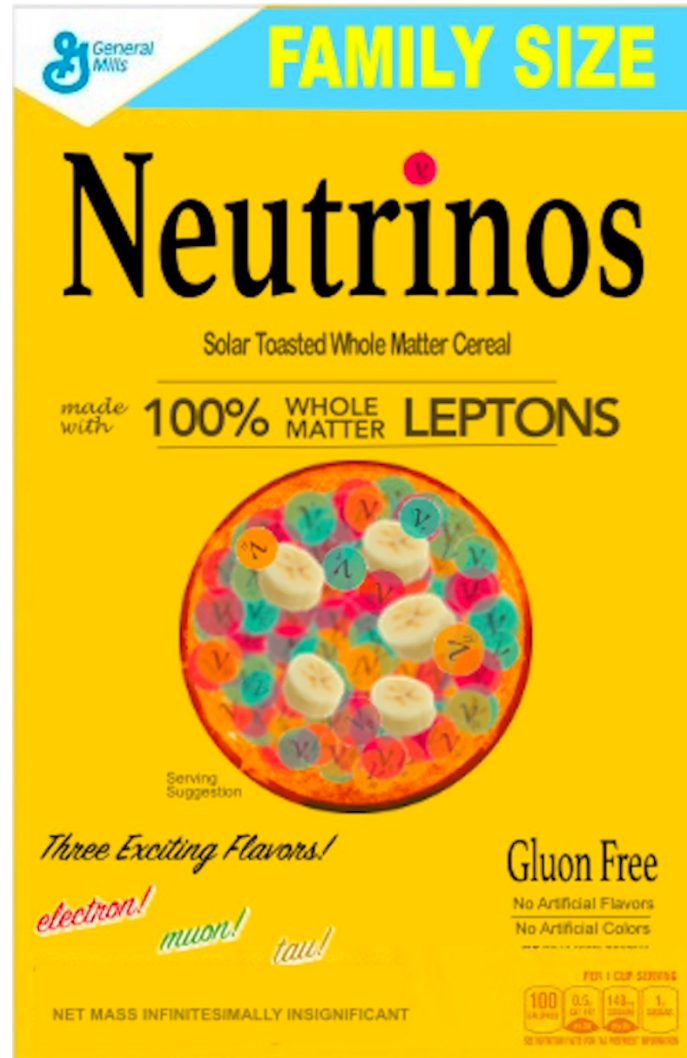
Summary



- ICARUS continues to take data from the BNB and NuMI beams for the past ~month with a very high efficiency of $> 97\%$
- The collaboration thanks AD for the very high-quality beam
- Data acquisition has been running smoothly with only a few crashes
- Made improvements to lower the coherent noise on the readout boards
- No changes are expected in detector operations for the remainder of beam operations



Thank You



Backup



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