Plan for the ProtoDUNE performance paper

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ProtoDUNE DRA Meeting

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PUBLICATION PLAN

Two separate "companion papers" (i.e. two consecutive articles on the same journal Issue):

- 1st Article on Detector Design, Construction and basic Performance from Commissioning and Operation *(ie the protoDUNE-SP "Technical Paper")*
- 2nd Article on more advanced Performance from off-line data reconstruction and analysis of LArTPC on the test beam *(ie the first "Performance of protoDUNE-SP detector…" paper)*

  - From Flavio's talk at the last collaboration meeting.
  - Gina Rameika will be the editor of the "Technical Paper".
  - I will be the editor of the "Performance Paper".
    - This talk discusses the plan for the "Performance Paper".

Strategy of the performance paper

- The performance paper will have a brief description of detector, beamline and data taking. The details will be in the technical paper.
- The performance paper will focus on the detector performance characterization aspects of both TPC and photon detectors.
- For each topic, we will identify one or a few persons to coordinate the effort and write the corresponding section.
  - Many people have agreed to contribute to the paper.
  - More discussions are needed for the detector summary and photon detector sections.
- People should start writing the details of the analysis methods and results using MCC11 data/MC samples while we continue to validate MCC12. The final results will be based on the MCC12 production.

First results on ProtoDUNE-SP LArTPC performance from a test beam run at the CERN Neutrino Platform

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Milestones

- We will identify people for the remaining sections (recommendations and volunteers are welcome).
- We aim to have the first draft on July 18 using MCC11 results.
- We aim to have the second draft on Aug 18 using MCC12 results.
- If Flavio, George and myself are satisfied with the second draft, we will start the review process as documented in DUNE-doc-1115:
  - WG review
  - ARC (Analysis Review Committee) review
  - Collaboration review

Design, construction and operation of the ProtoDUNE-SP Liquid Argon TPC

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