

MC DISCUSSION

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3/5/19

MC for protoDUNE analysis

- What samples are needed and how to find them
- https://wiki.dunescience.org/wiki/Production_and_Processing
- https://wiki.dunescience.org/wiki/Useful_Production_Links

- Requests are in servicenow
- https://fermi.servicenow.com/nav_to.do?uri=%2Fsys_report_template.do%3Fjvar_report_id%3Dd6ee1b9bdb9203c03aa6fd0e0f96190c%26jvar_selected_tab%3DmyReports%26jvar_list_order_by%3D%26jvar_list_sort_direction%3D%26sysparm_reportquery%3D%26jvar_search_created_by%3D%26jvar_search_table%3D%26jvar_search_report_sys_id%3D%26jvar_report_home_query%3D

Specifying jobs

- Need code version
- Fcl files
- Beam input files
- Gets quite complex quite quickly as you have n beam settings and different fcl's for detector configs.
- In the end you can find the output you want by looking for sam metadata:

Jobs use POMS

- Can set up a config file that specified # of events, fcl files, versions ...
- Jobs can have multiple steps!
- POMS can then keep track of success and failure, do resubmissions with more memory or time ...

- Getting a lot easier to set up and will become available for “users” to use for things like tuple creation.

Info you can use to find outputs

beam.momentum: -1.0

beam.polarity: -1

DUNE.campaign: MCC11

DUNE.production_status: final

DUNE_MC.beam_energy: -1.0

DUNE_MC.detector_type: protoDUNE SP

DUNE_MC.electron_lifetime: 3ms

DUNE_MC.liquid_flow: no

DUNE_MC.space_charge: no

DUNE_MC.with_cosmics: 1

MC.liquid_flow: no << duplicate information?

MC.space_charge: no

MC.with_cosmics: 1

Runs: 1.0000 (physics) << this should be protoDUNE-sp

finding

- samweb list-files "DUNE_MC.detector_type 'protoDUNE SP' and data_tier full-reconstructed and beam.momentum=1" – summary
- Is an example but would likely need some other qualifiers

Needs – people to help

- Once configs are set up, jobs do need people to keep them going and the current production team is very swamped
- Experts can help set up but you don't have to be Linus Torvalds to keep em going. You can help and impress your friends with the thousands of cores worldwide that are doing your bidding.
- Although expert help with scripting and improving the system would also be very welcome.
- Can job-sitting count as shifts for the experiment (1 week = 1 shift?)

Issues

- Metadata and tracking look like they may need some work
- Add the request-id to the metadata so you can see how it is going.