

Building LBNE photon library

Zepeng Li

Department of Physics
Duke University

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- Thanks to Ben Jones' work on MicroBooNE, we can save a lot of time. Most of his work can be used in LBNE. (<https://cdcvs.fnal.gov/redmine/documents/578>)
- Voxelization scheme
sim::PhotonVoxel and phot::PhotonVisibilityService need to be modified to accommodate LBNE geometry.
LBNE has two identical parts. Could we just build the library for one part?
LBNE has several APAs instead of one in MicroBooNE. How should we deal with the APAs in voxelization?
- Data products
The data products involved in building the library wouldn't be different from MicroBooNE. But products in RawData and RecoBase would be different.

- Sensitive Detectors

LBNE uses light collector instead of PMT in MicroBooNE.

The different optical detector wouldn't influence building the photon library.

Last week, we talked about dividing the light collector into 10 bins. Does this exist in gdm1?

- Building LBNE photon library will take longer time and produce a larger file(114MB for MicroBooNE).

I'm still waiting for grid permission, so I cannot estimate the time required on the fermilab grid. If we build on a local cluster, it will take months or even years!