

# Status of Optical Simulation for LBNE

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# Geometries

- Working mostly toward having simulations ready for 35t test
  - Using photon libraries and fast optical simulation previously developed
  - Currently have a geometry in place but need handle attenuation and efficiencies externally from LArSoft
  - Would like to have this handled internally to LArSoft as much as possible to avoid use of offline software

# Geometries

- Question of how to best handle many different PD modules in 35t
  - 8 PD modules within 35t
    - Includes three very different geometries
    - Each geometry includes different light collection technologies
    - Many unknown parameters
- How much should be parameterized vs. adding all of the physics to LArSoft?

# Outputs

- What type of information do we want from the PD simulation?
  - Somewhat direct how the parameterization of simulation is handled
  - How to best coordinate with TPC information to do things like combined reconstruction