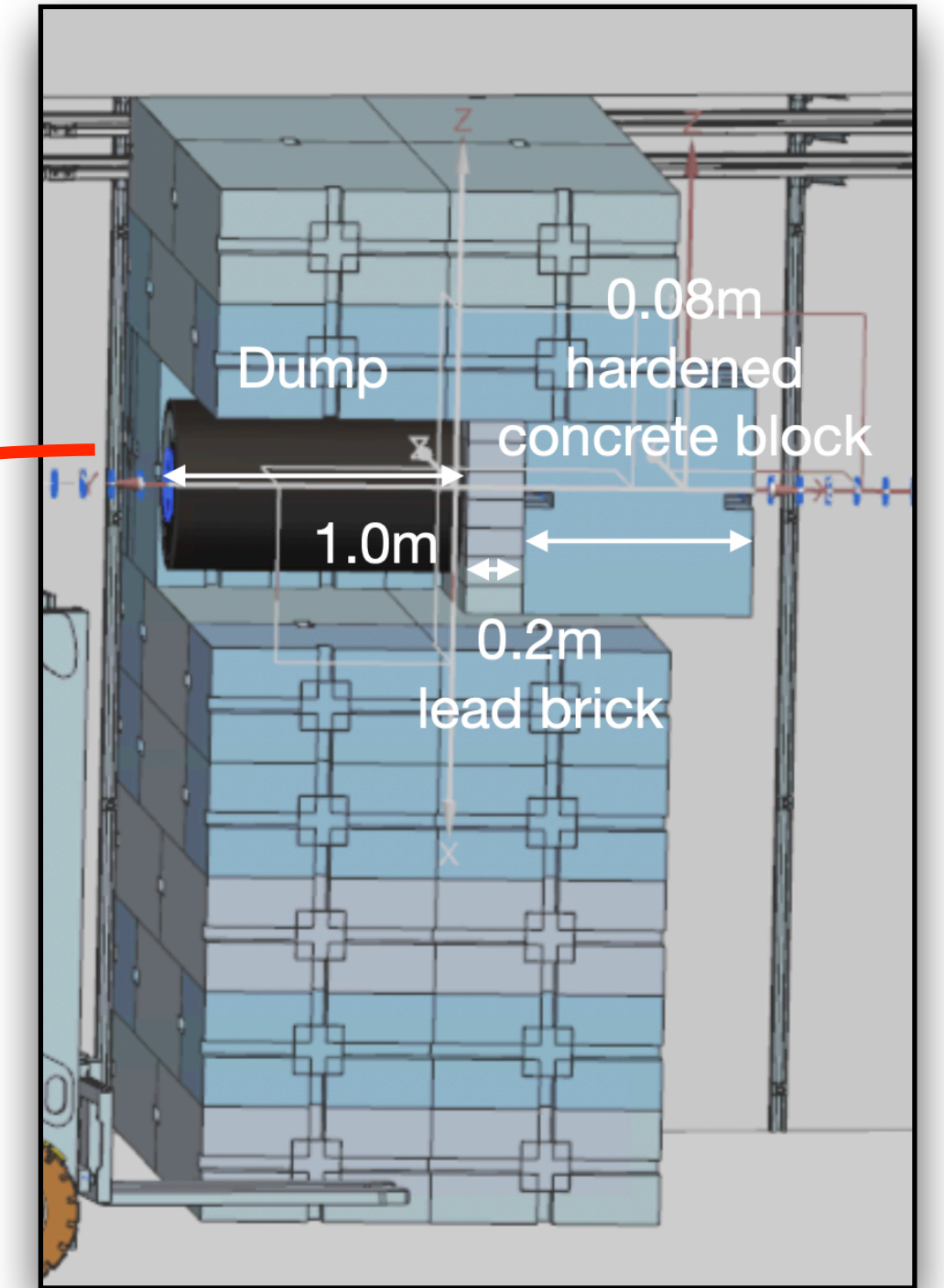
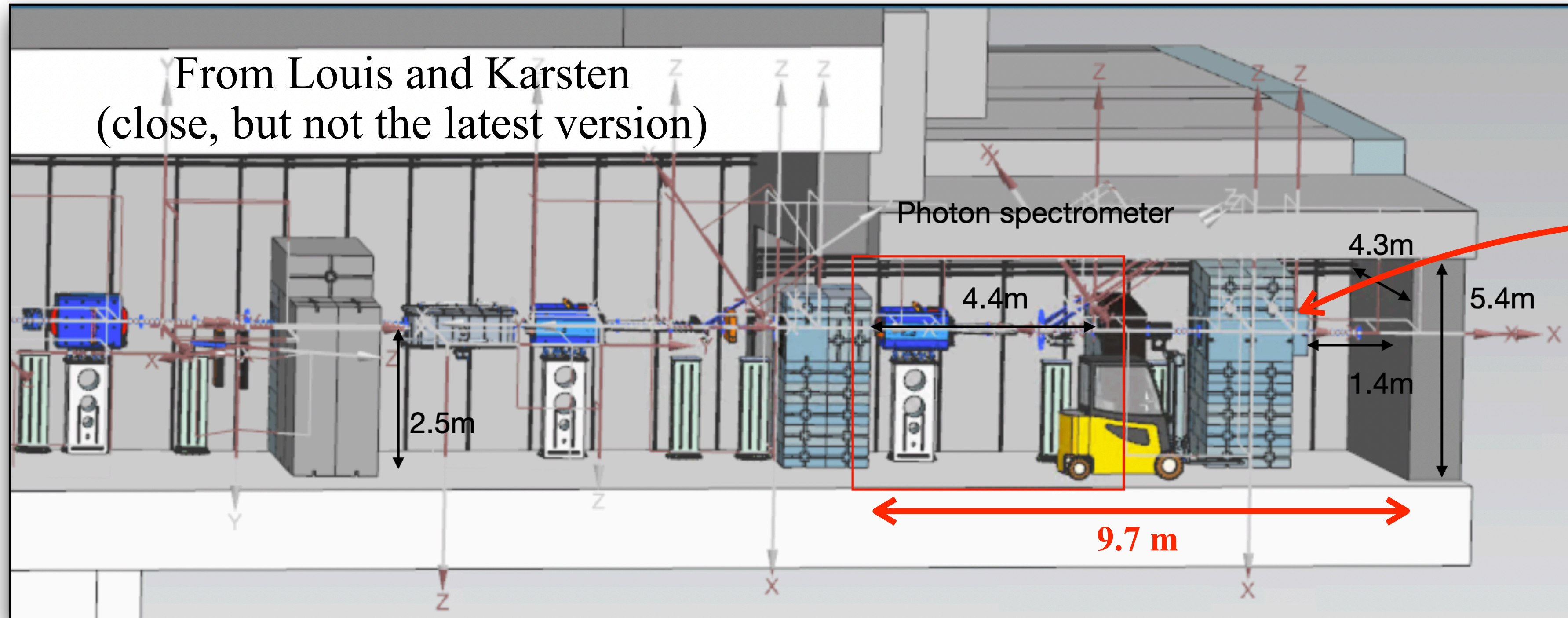


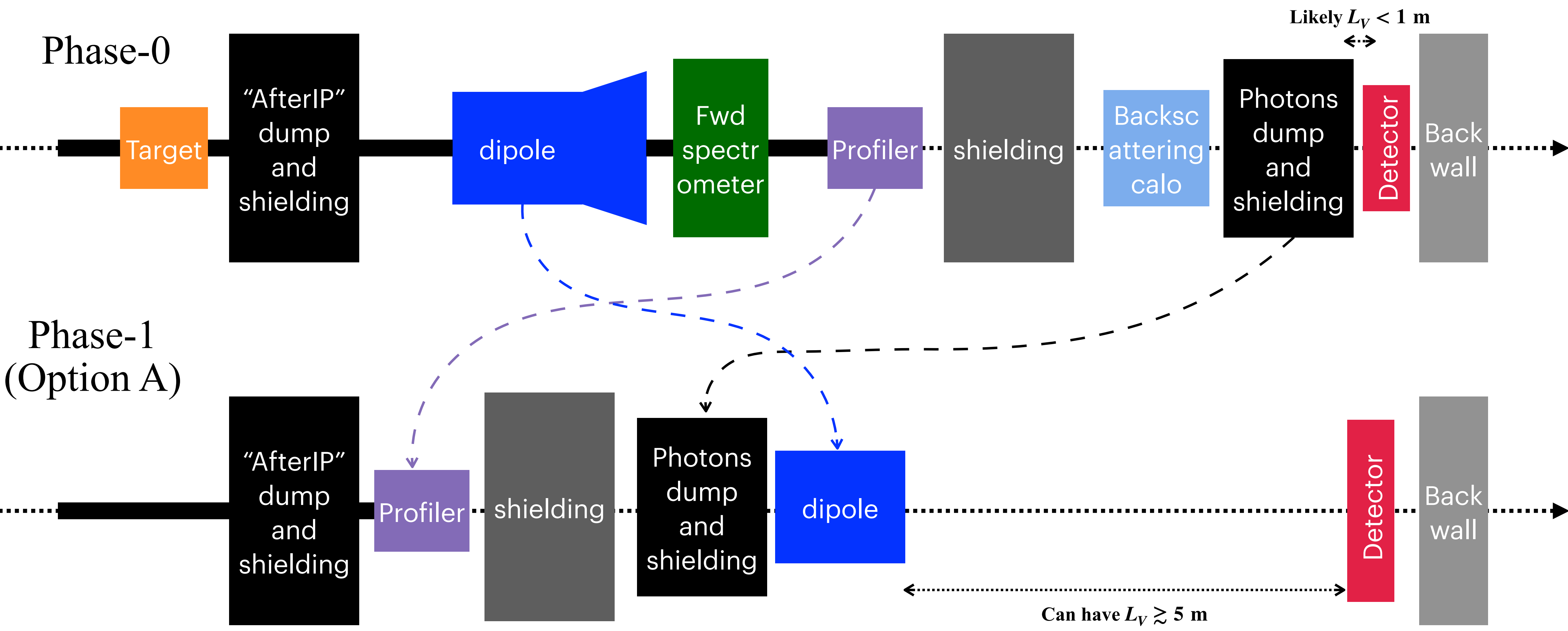
# Problems...



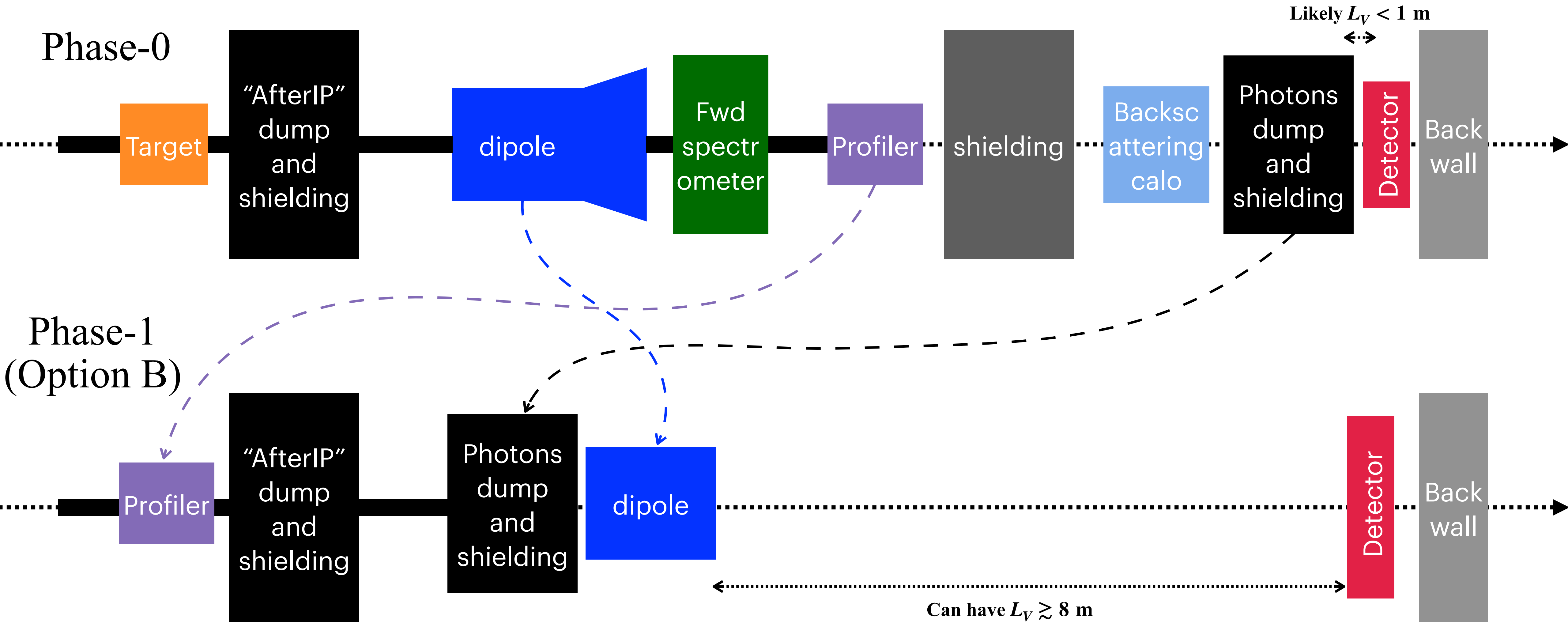
- Space between back wall and dump (currently ranging 0.6-1.4 m), but this is not final:
  - IP chamber will move downstream, quadrupoles may move upstream, vacuum elements to be inserted,...
  - whatever change in the model, we probably cannot buy more than  $\sim 1-0.5$  m
- Dump design (material, length, diameter)
  - Radio-protection: it needs to be enclosed
  - Phase-0 dump can be much smaller, but we don't want to have 2 dumps (way too complicated)



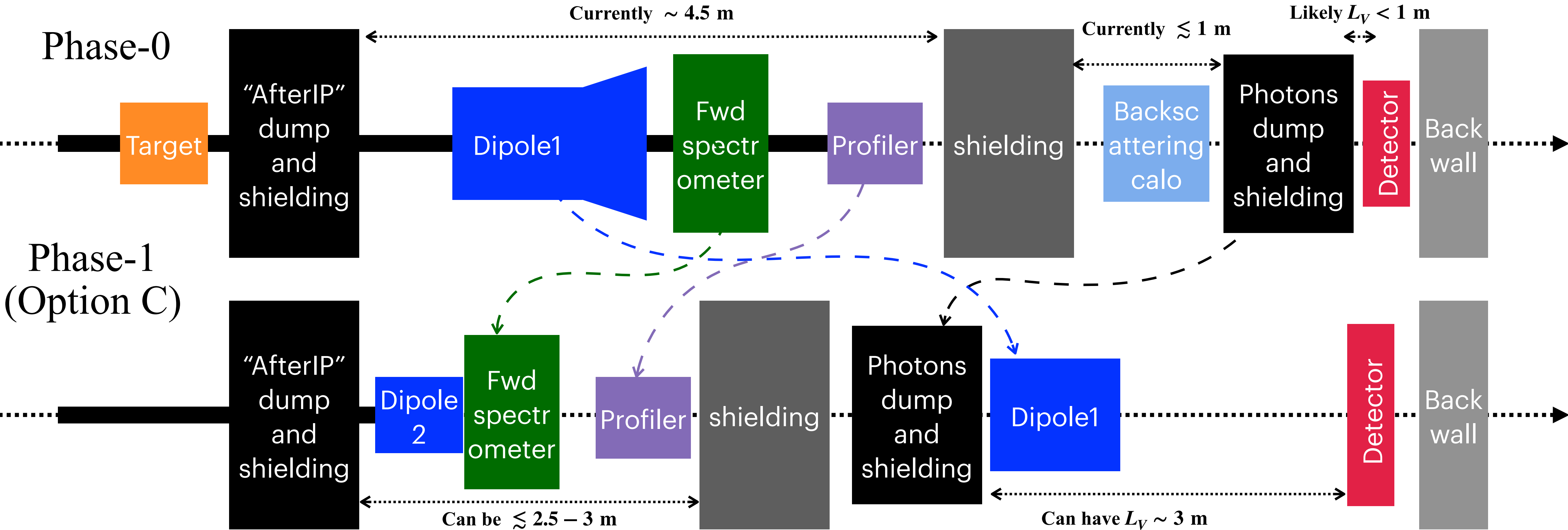
# Proposal for special NP0D run in phase-1



# Proposal for special NP0D run in phase-1



# Proposal for special NPOD run in phase-1



- Reluctant to rely only on the IP screen+Cherenkov for the photon spectra measurement due to (1) shot-to-shot reproducibility and (2) multiple emissions
- Spectrometer length may be reduced by  $\sim 1.5$  m, depending on the energy range we want to cover, e.g. up to 5 GeV (extrapolate above)
  - will need another magnet, but if we set the maximum measurable energy to e.g. 5 GeV then it can be a smaller magnet
  - we need to check what is the fraction of signal diphotons which are due to primary photons below 5 GeV
- Need to check the beam spot at the profiler in its new location (for the shuffled model) to see if its envisioned granularity is good enough for this beam size
- Radiation dose for electronics and access (activation) concerns for the profiler will be the same between the two cases
- Need to answer the question how the elements can be moved around...