

Some Questions On Magnet

Mike Kordosky, Steve Manly, Alfons Weber, Kam-Biu Luk

6 November 2017

Scientific Questions If KLOE Solenoid Is Used

- How is GArTPC configured in KLOE?
- How much material in front of ECAL?
- What is reasonable fiducial volume? (STT and GArTPC)
- What is tracking performance? (STT and GArTPC)
- What fraction photons convert in tracker if they originate in the fiducial volume? (STT and GArTPC)
- What is expected ν_μ CC event rate per POT within a reasonable fiducial volume? (STT and GArTPC)
- Is there a reasonable configuration for using 3DST target and STT or GArTPC? If so, what is mass range for such a target?
- Is there any room for a Muon system inside the yoke? That is, spaces in the iron.
- How uniform is the field in the fiducial volume?
- What is the background rate in the fiducial volume?

Scientific Questions If A Dipole Is Used

- How is dipole necessary or better for GArTPC?
- Is mirror plate needed both upstream and downstream of the dipole to contain the fringe field?
- Is it feasible to run a dipole at $B > 0.4\text{T}$?
- What is the background rate in the fiducial volume?
- How uniform is the field in the fiducial volume?
- What is the minimum fiducial volume?