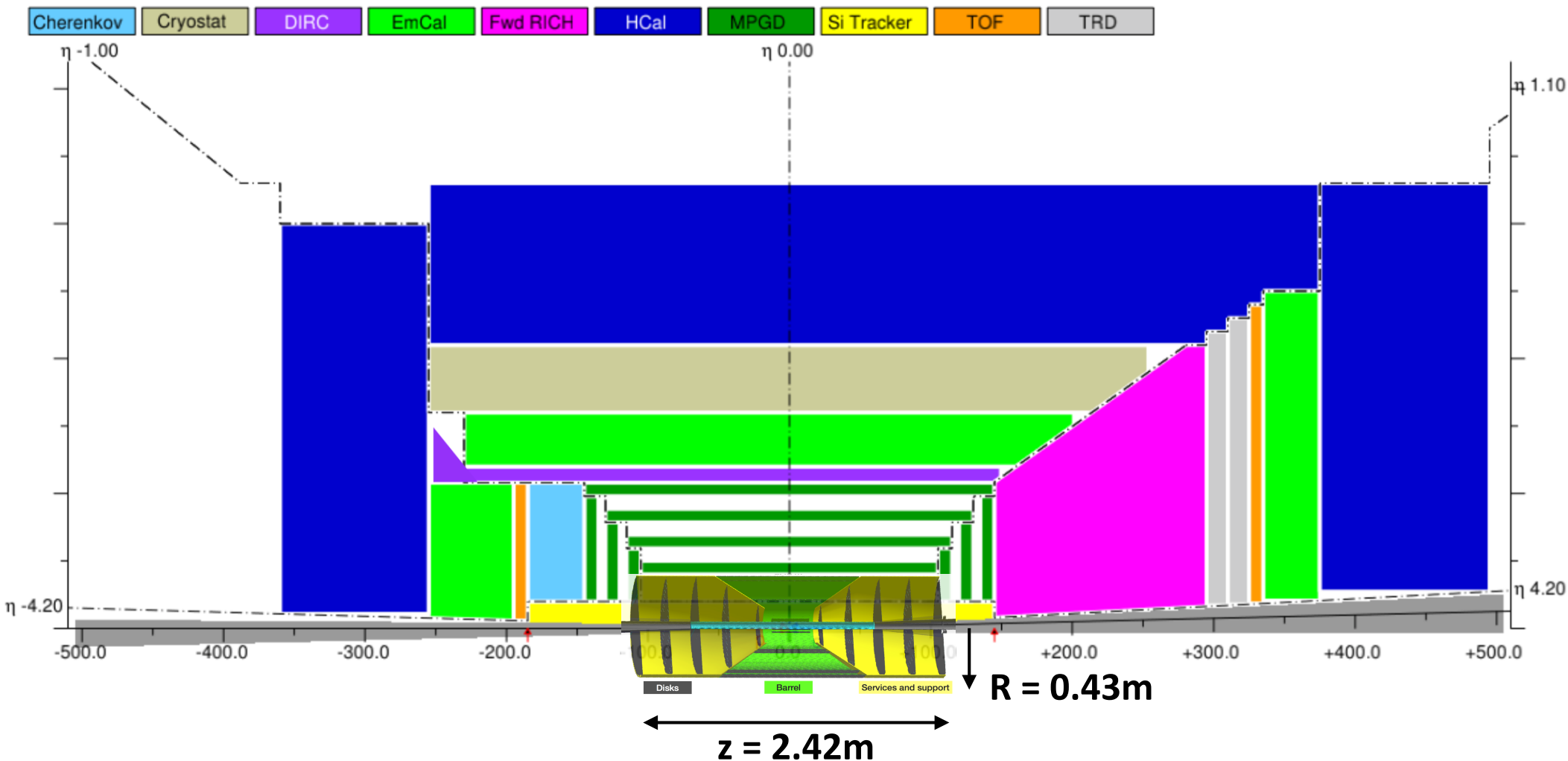
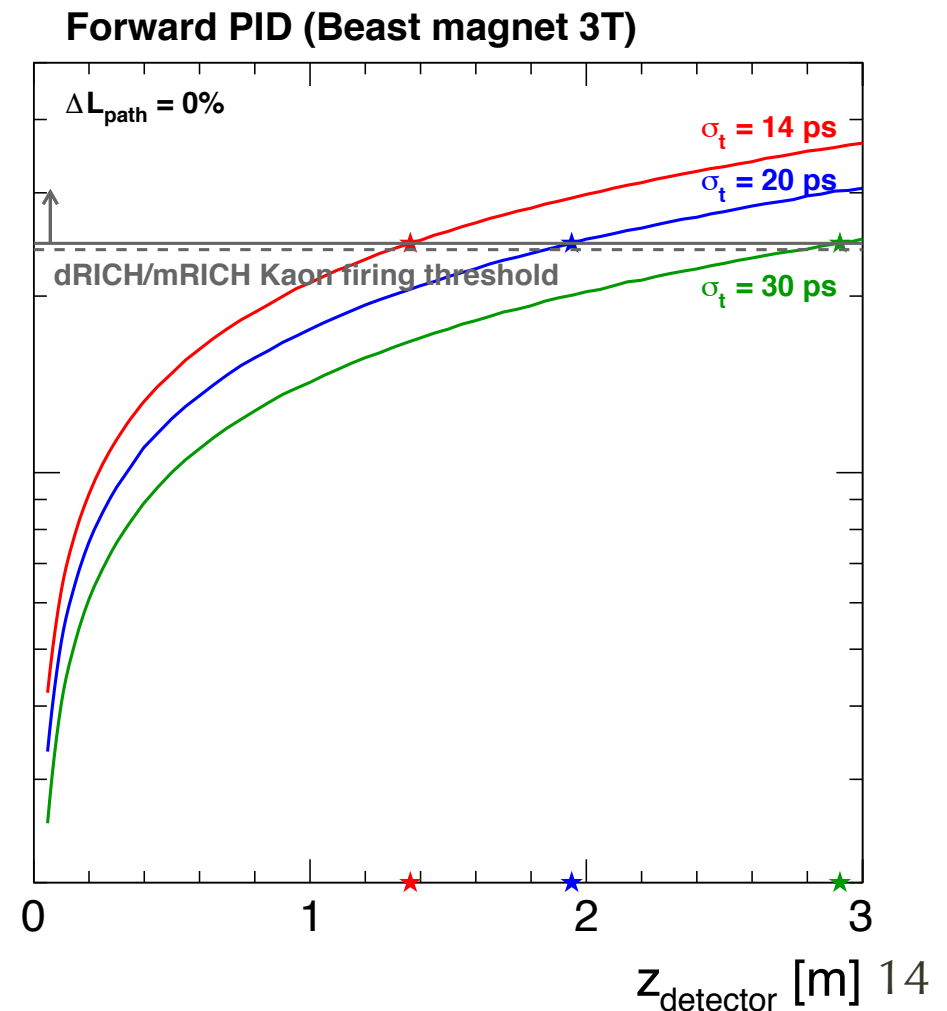
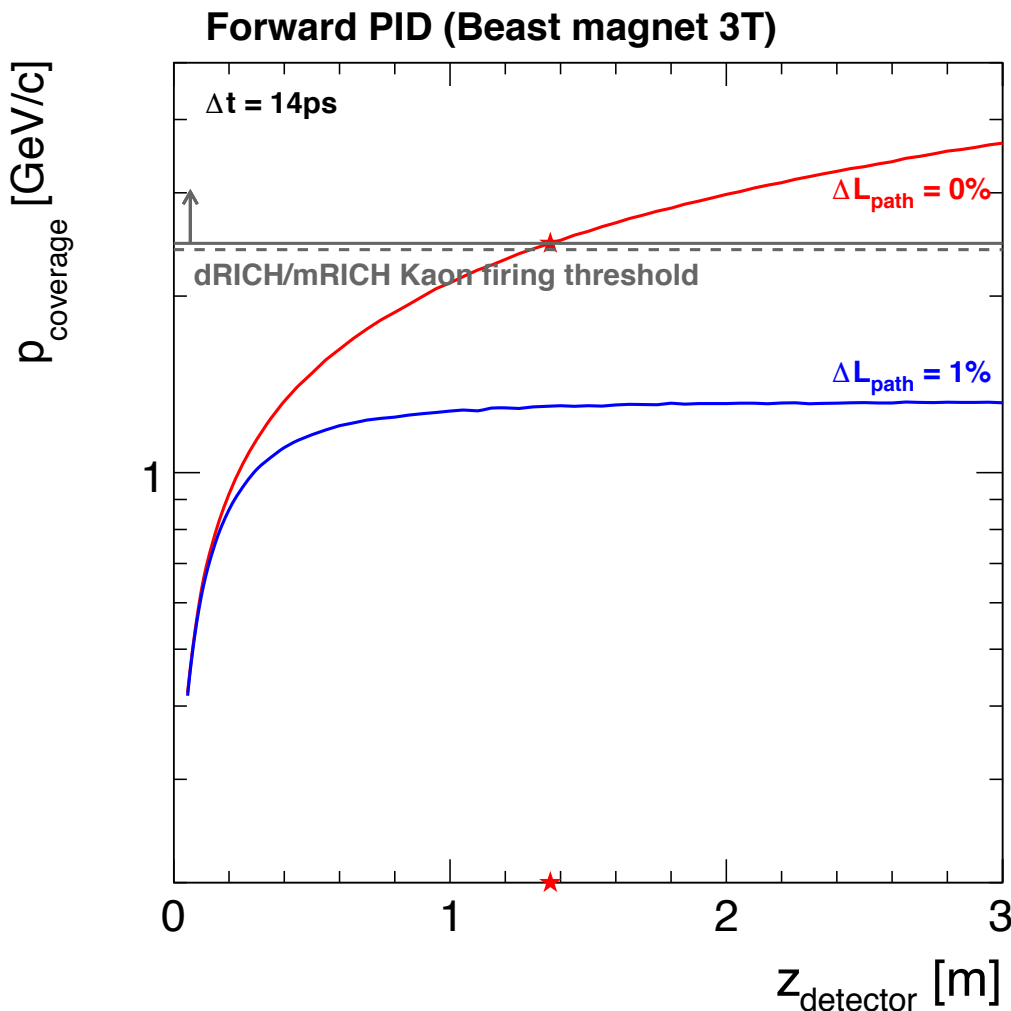


Potential locations for LGAD



LGAD at forward and backward

- Two layers 20ps LGAD $\rightarrow$ 14ps
- Pathlength uncertainty cannot be $>1\%$
- LGAD (≤ 2 layers) needs to be placed $>1.5\text{m}$



Summary

- Need full simulation to determine the path length uncertainty
- From the fast simulation it looks the closest position one can put LGAD TOF would be $>\sim 1.5\text{m}$ for forward and backward
- Closest would be right before the Cherenkov detector

