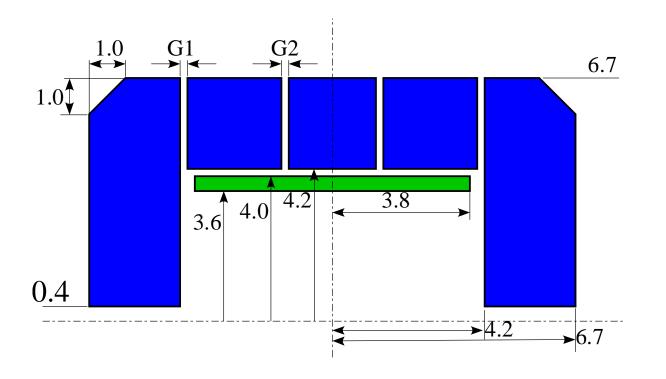
# Stray field as a function of gap distance

Yasuhiro Sugimoto KEK 12 Nov. 2008

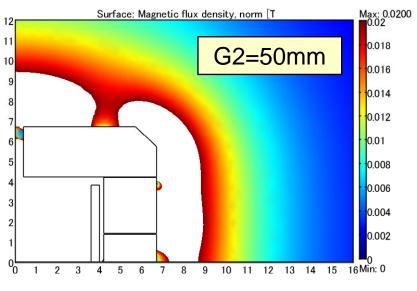
#### Model

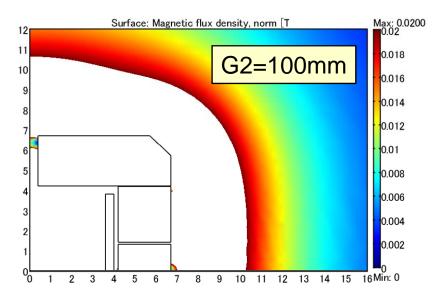
• Simple 2D model (B=3.5T)

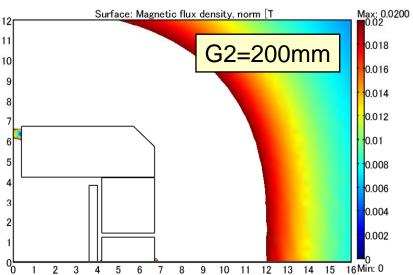


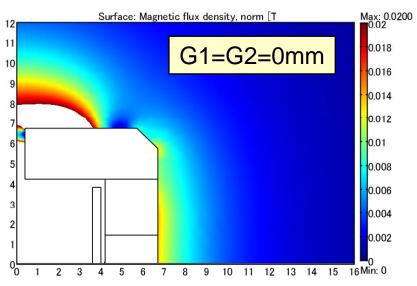
G1 (mm)	G2 (mm)
25	50
25	100
25	200
50	50
100	50
200	50

### Stray field (G1=25mm)

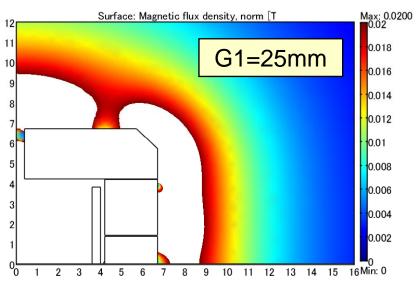


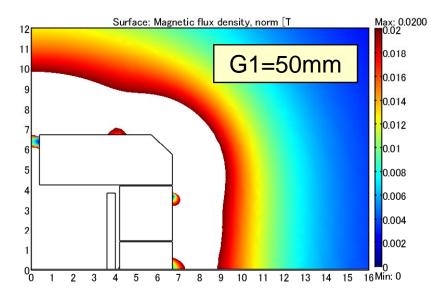


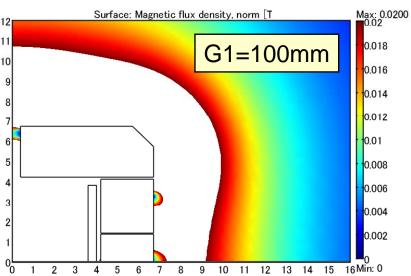


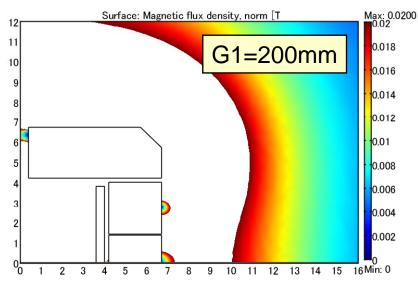


## Stray field (G2=50mm)









#### Conclusion

- Both endcap-ring gap and ring-ring gap affect the stray field substantially
- We need estimation of amount of cables/pipes from endcap detectors (ECAL and HCAL) in order to decide the gap between endcap yoke and barrel yoke