

# **Rate scan results with STD mix of CMS Endcap chambers**

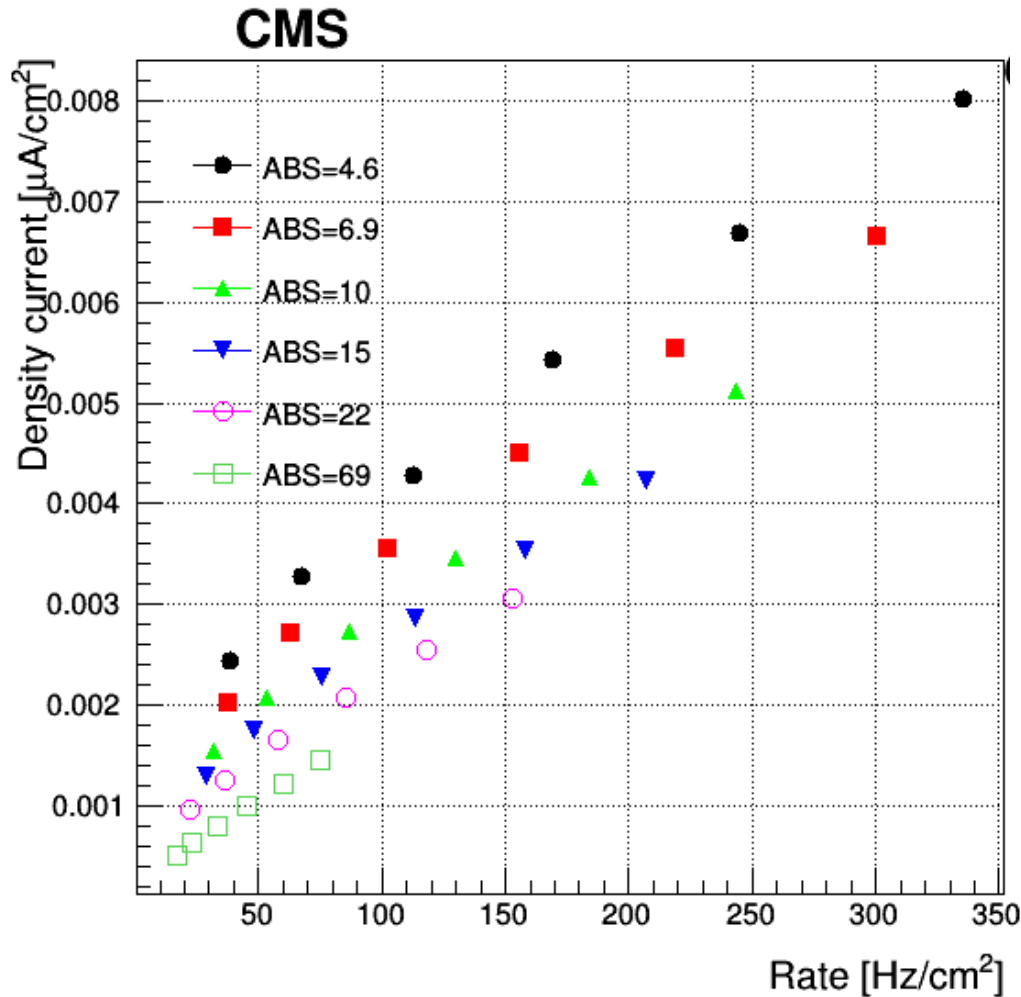
Reham Aly  
Ecogas meeting  
9June2021

# Overview

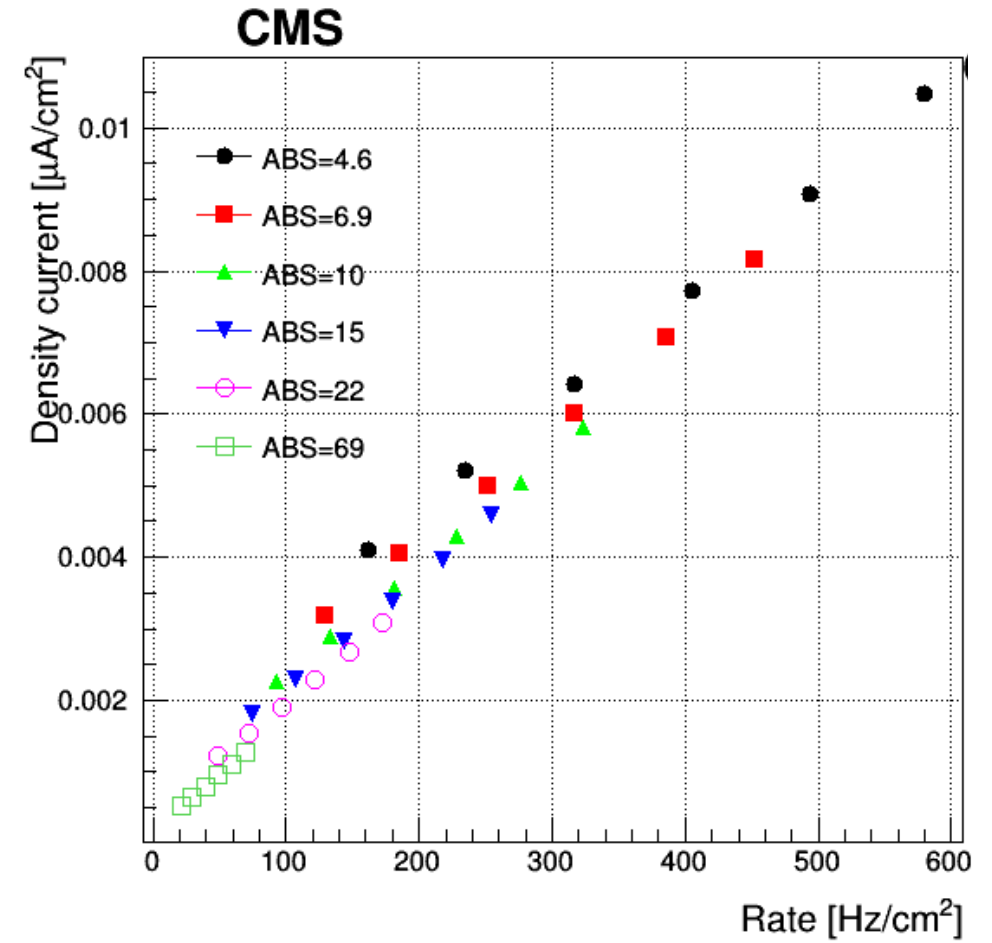
- Rate scans for CMS Endcap Chambers (2 RE2/2 & 2 RE4/2) - Irradiated and Reference chambers
- Using Standard gas mixture (95.2% freon - 4.5% isobutane - 0.3% SF6)
- ABS values 4.6 , 6.9 , 10 , 15 , 22 , 69
- 7 HV points from 9.4 to 9.9 KV

# Current Density vs. Rate @ different ABS

RE 2/2 - IRRADIATED



RE 2/2 - REFERENCE

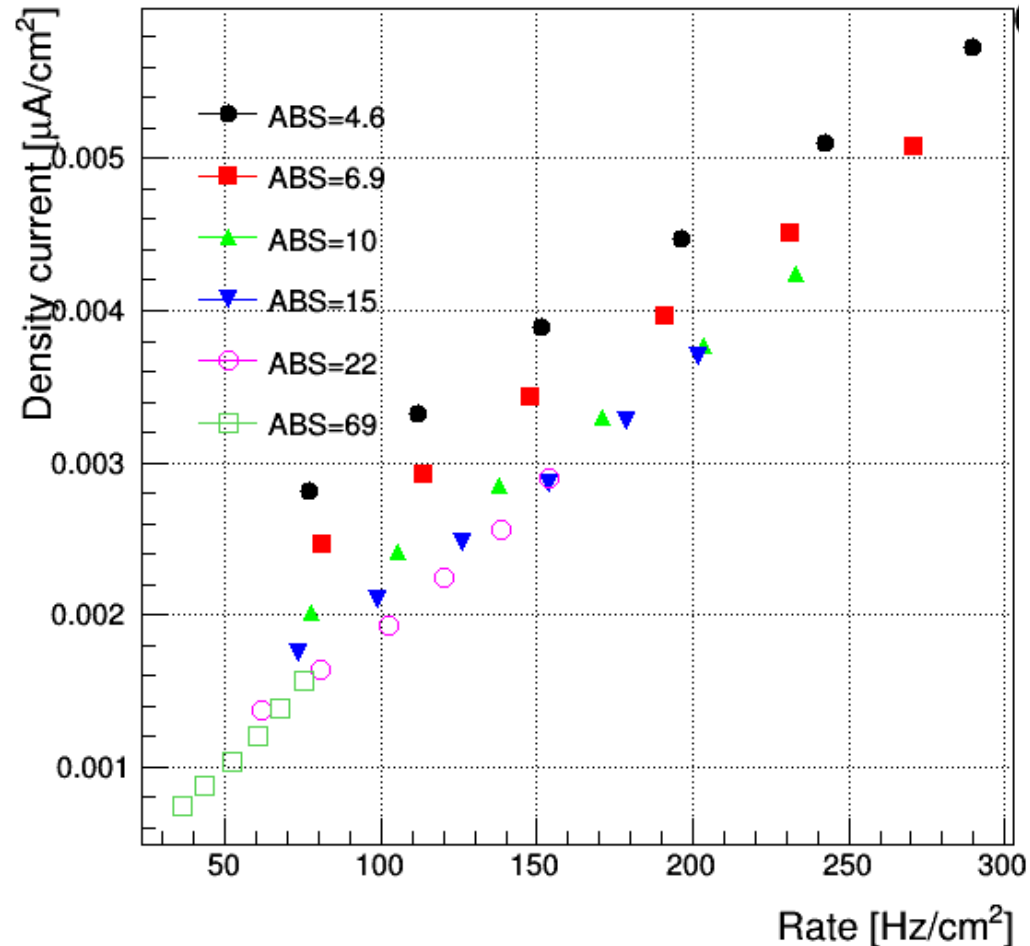


HV = 9.4, 9.5, 9.6, 9.7, 9.8, 9.9 KV

# Current Density vs. Rate @ different ABS

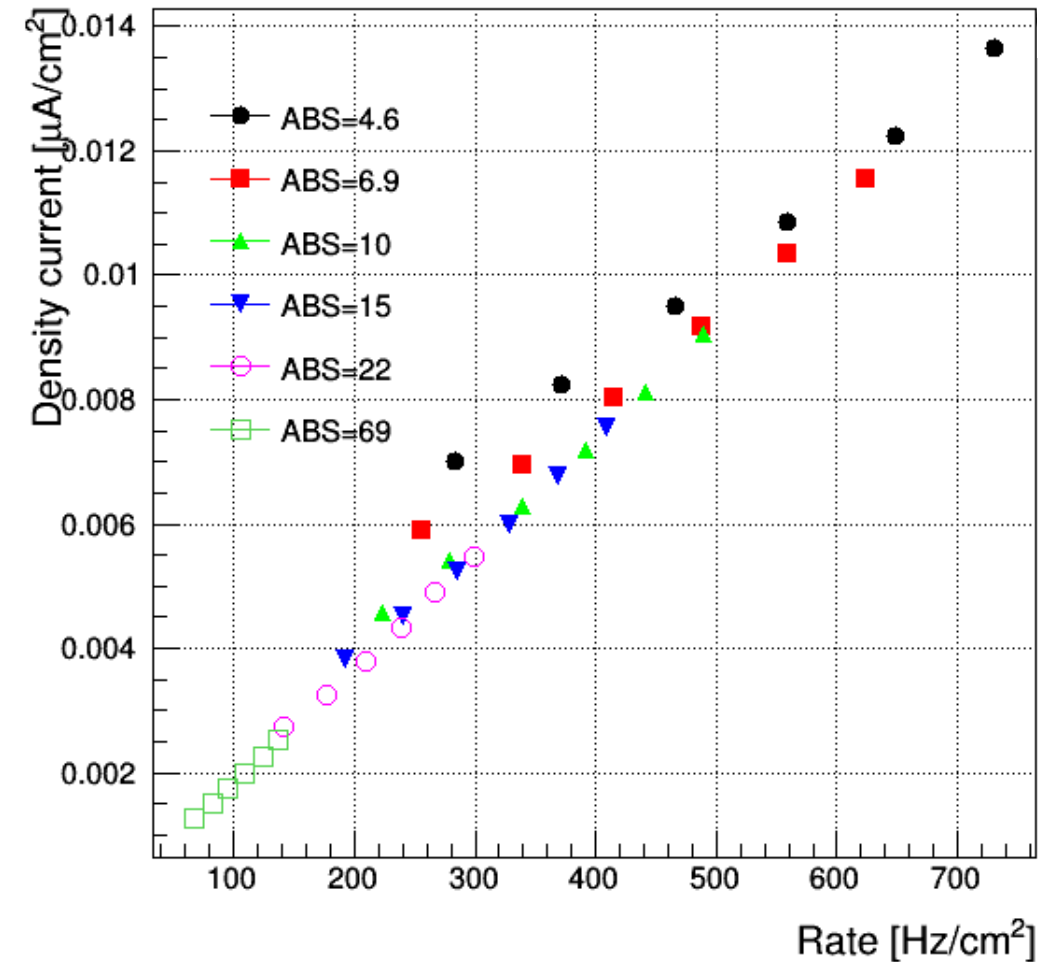
RE 4/2 - IRRADIATED

CMS



RE 4/2 - REFERENCE

CMS



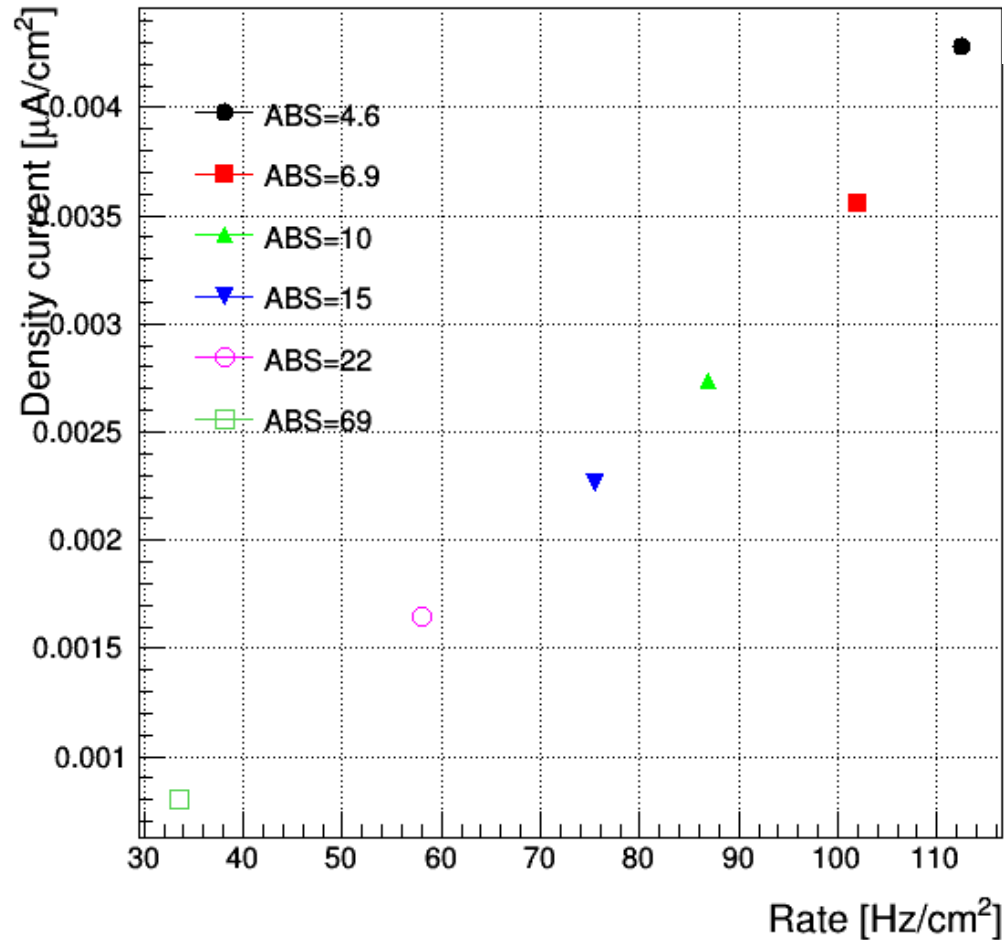
HV = 9.4, 9.5, 9.6, 9.7, 9.8, 9.9 KV

# Current Density vs. Rate @ different ABS

RE 2/2 - IRRADIATED

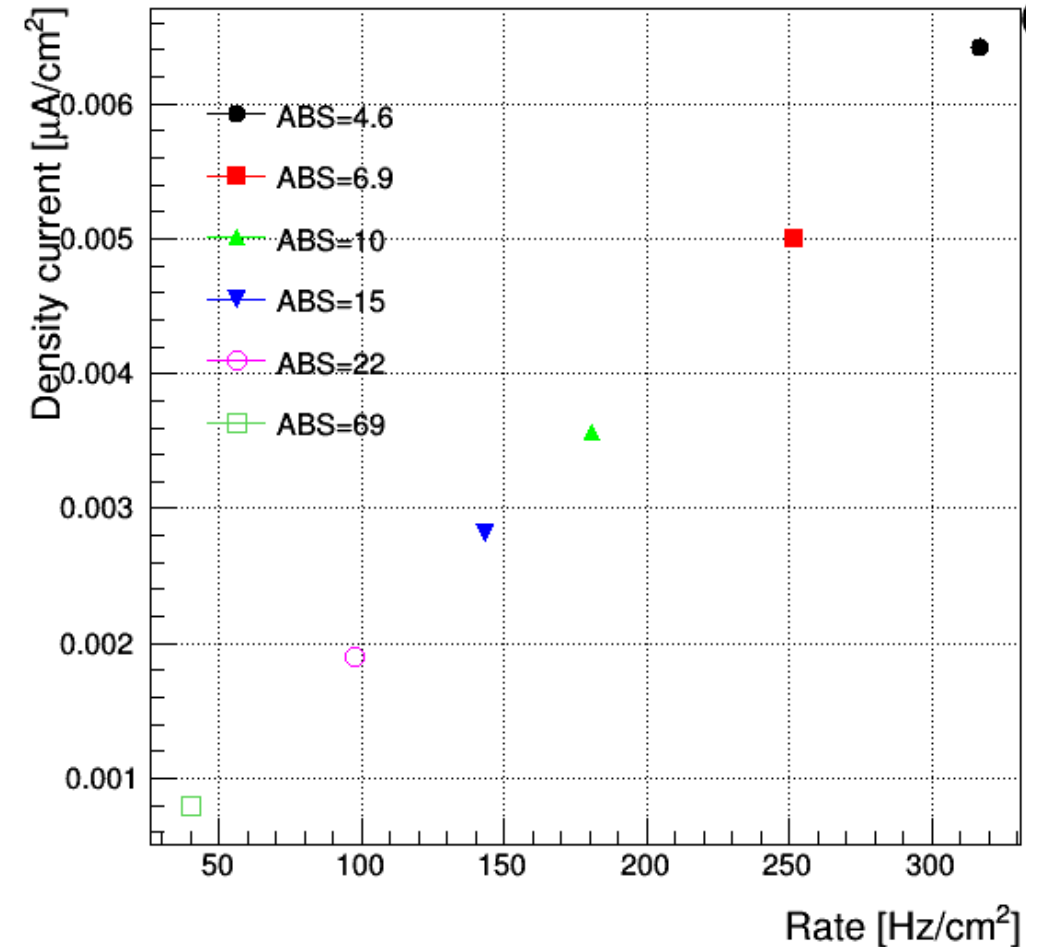
@ HV = 9.6 KV

CMS



RE 2/2 - REFERENCE

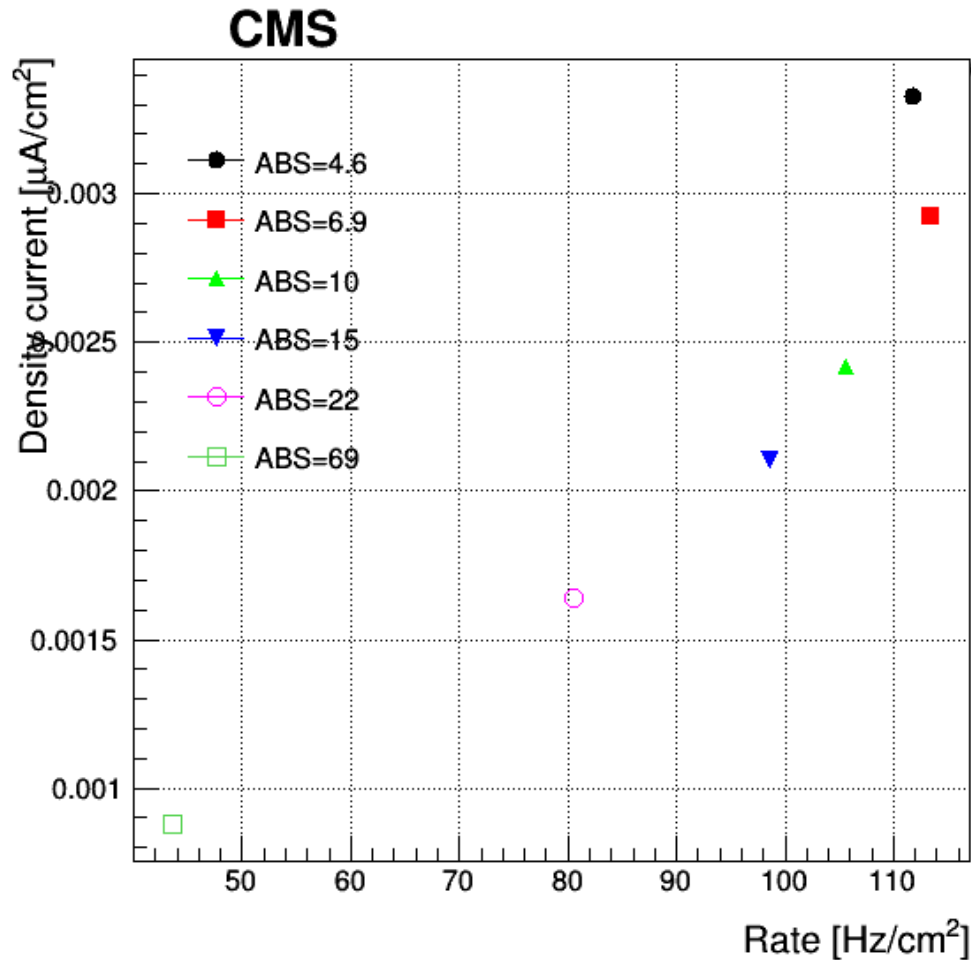
CMS



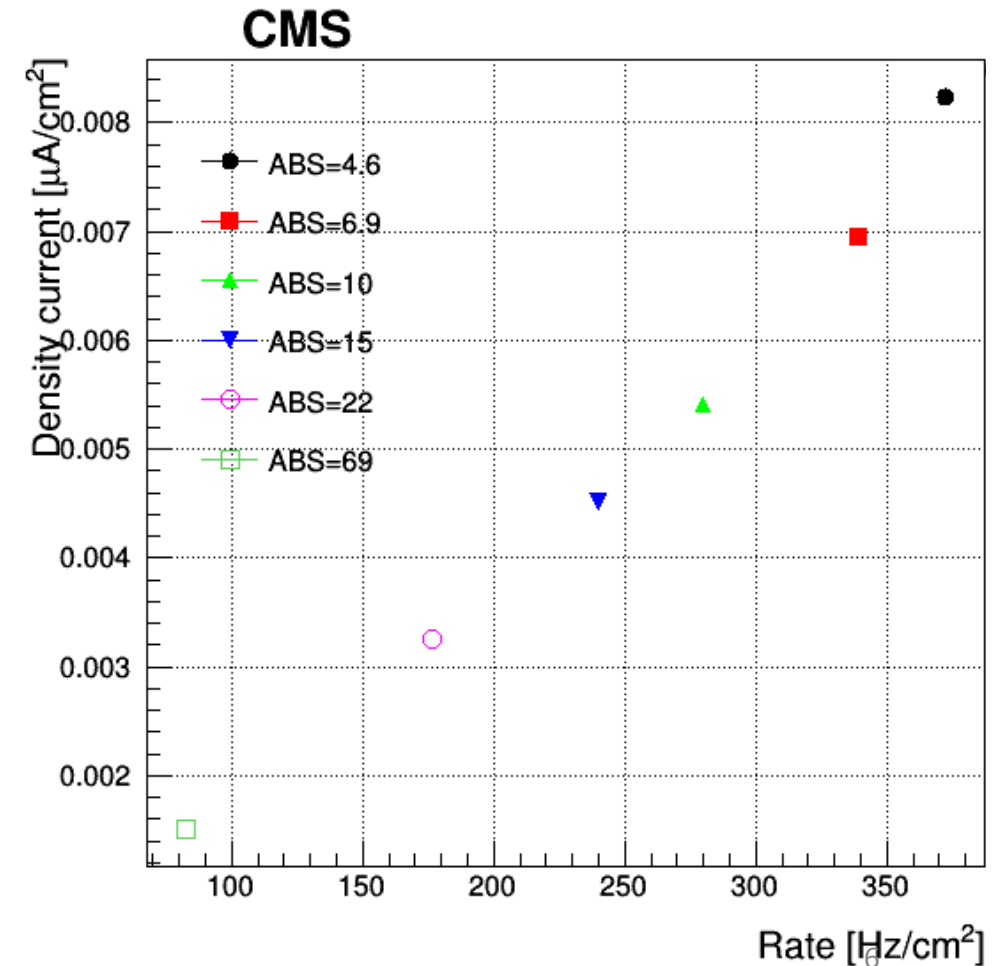
# Current Density vs. Rate @ different ABS

RE 4/2 - IRRADIATED

@ HV = 9.5 KV



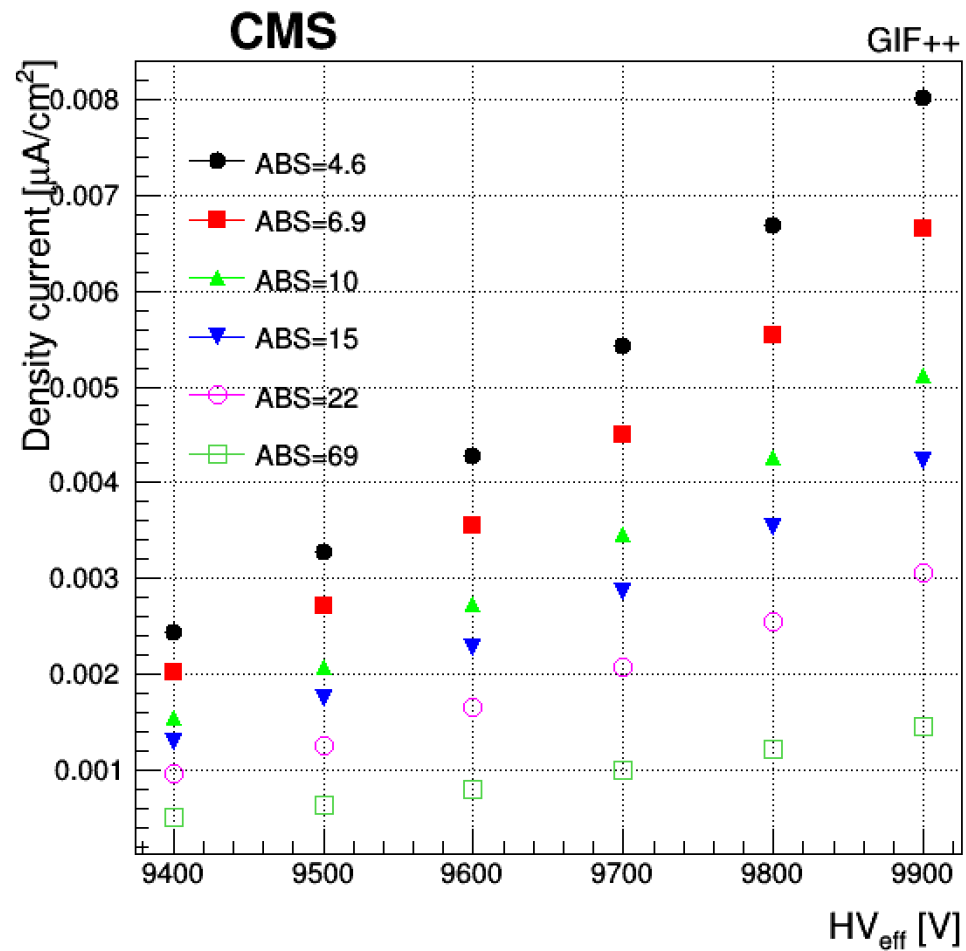
RE 4/2 - REFERENCE



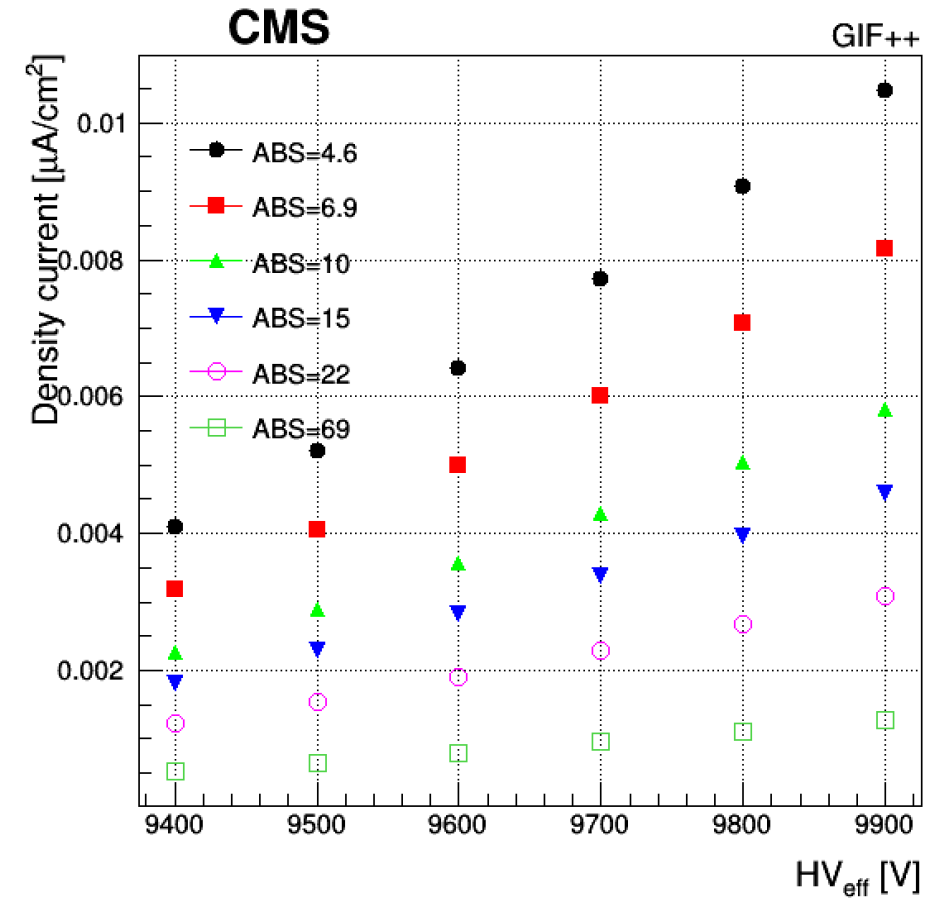
Backup

# Current Density vs. HV@ different ABS

RE 2/2 - IRRADIATED

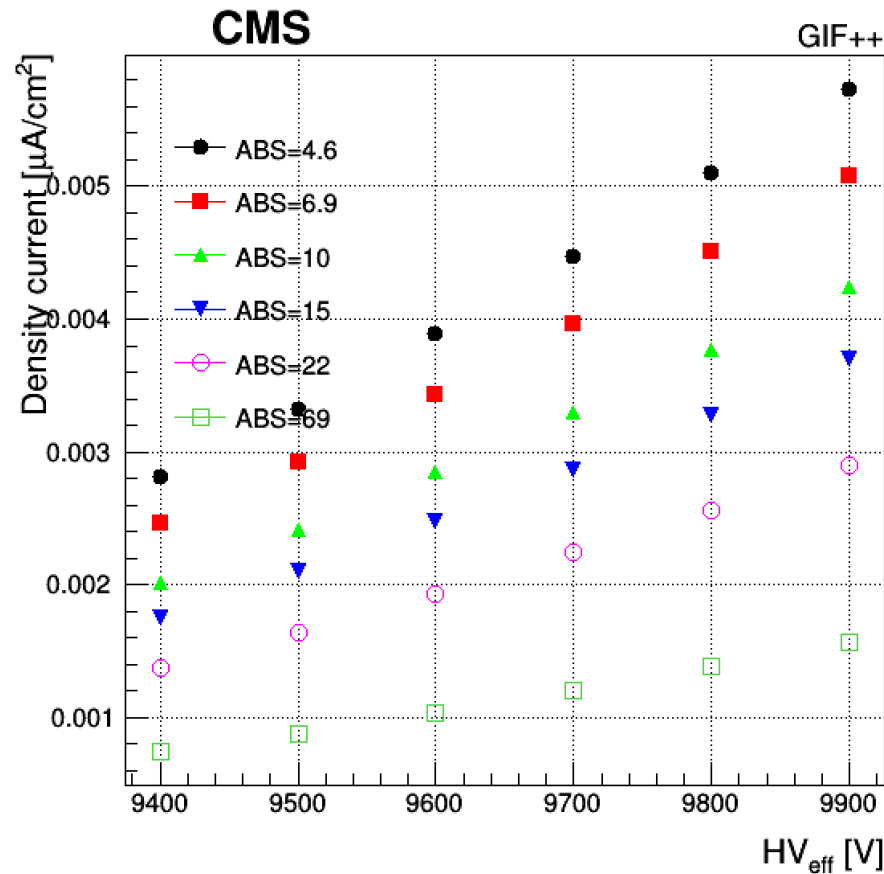


RE 2/2 - REFERENCE

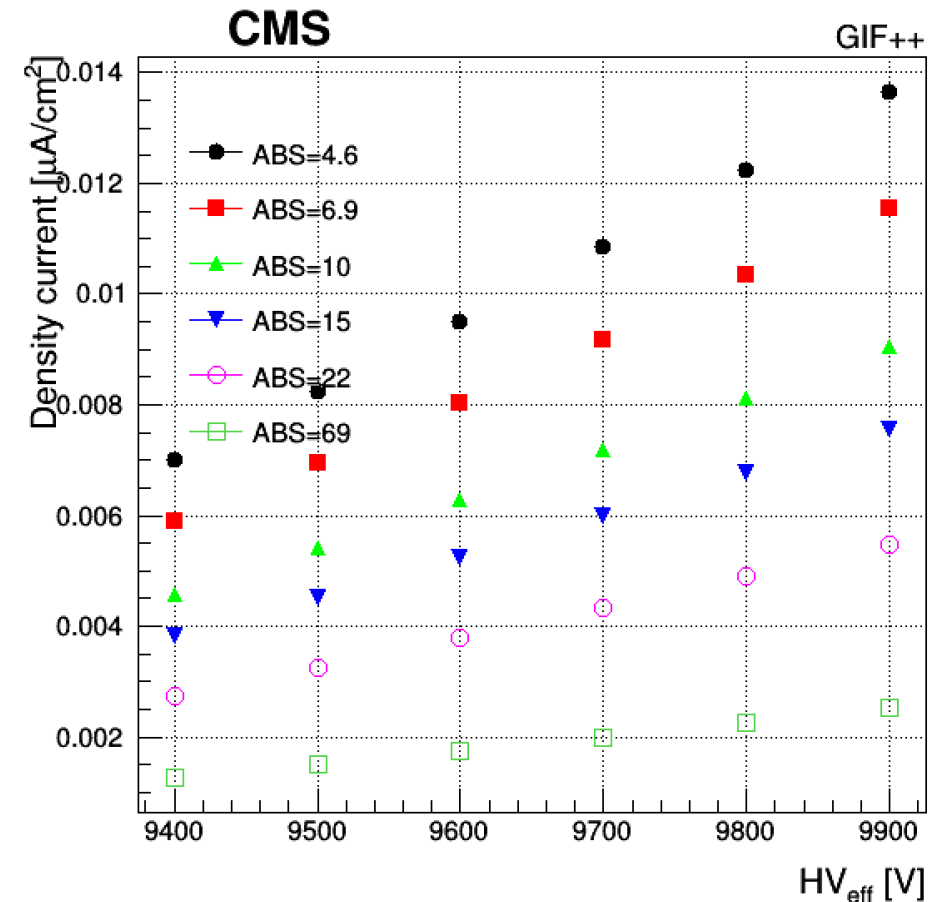


# Current Density vs. HV@ different ABS

RE 4/2 - IRRADIATED

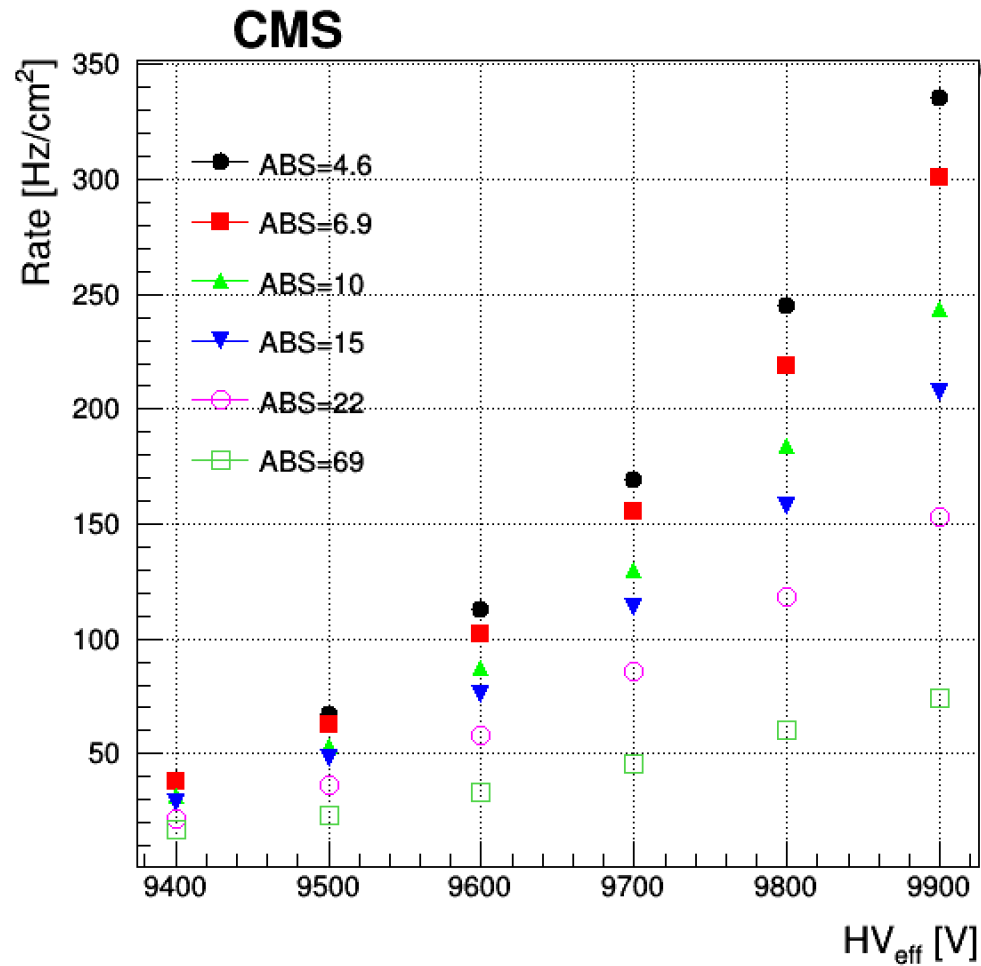


RE 4/2 - REFERENCE

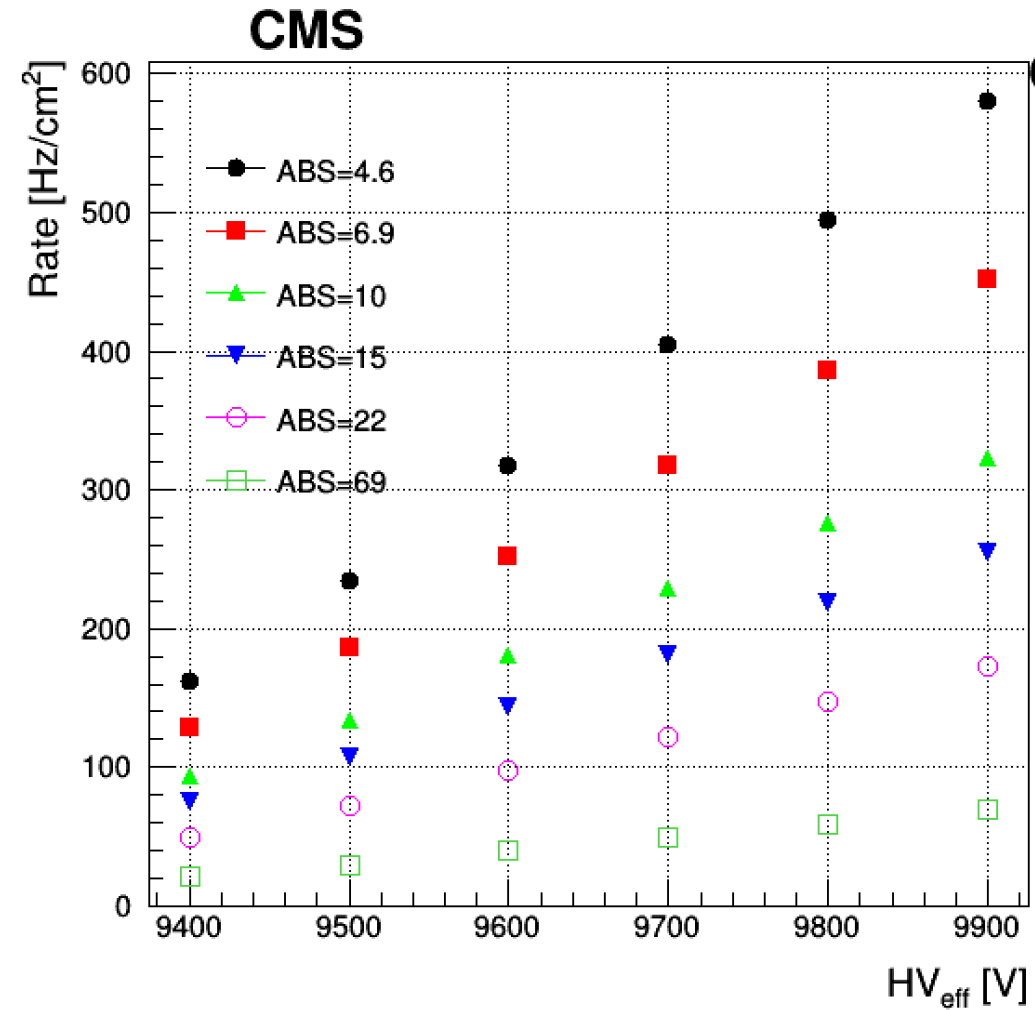


# Rate vs. HV@ different ABS

RE 2/2 - IRRADIATED

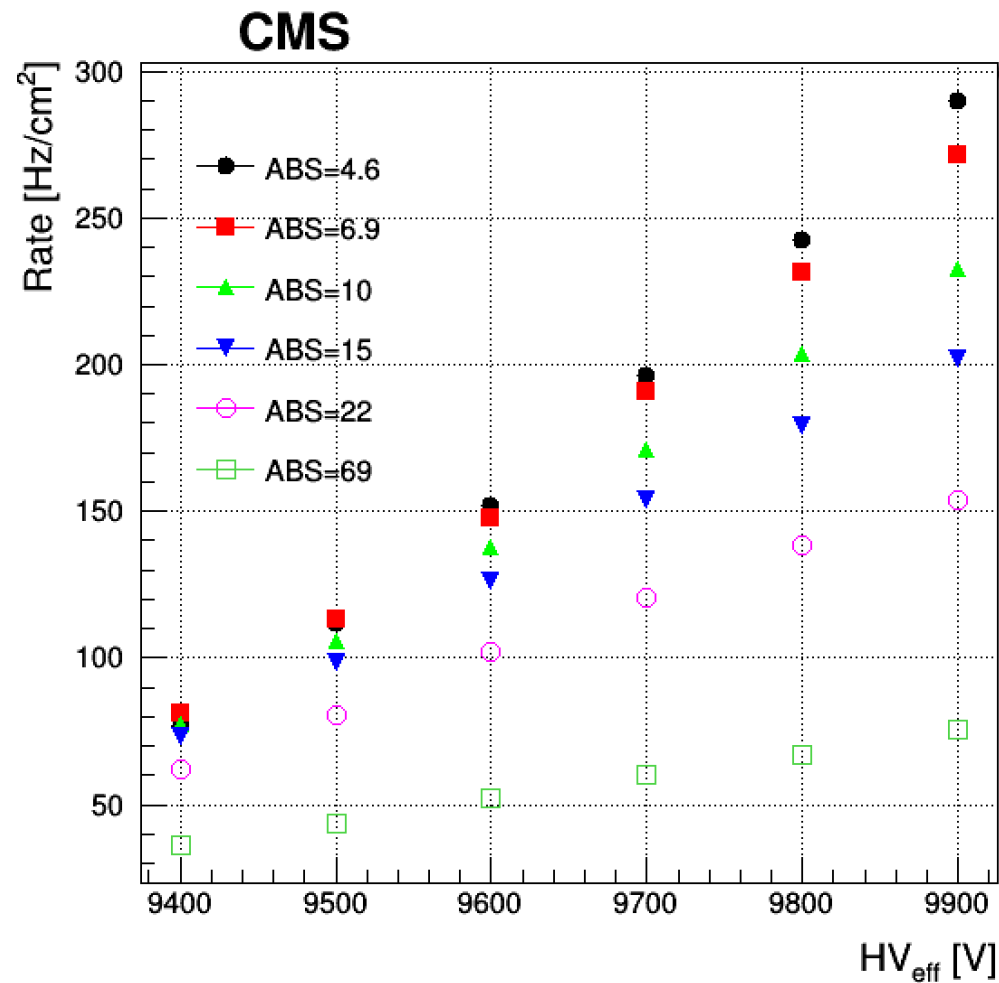


RE 2/2 - REFERENCE



# Rate vs. HV@ different ABS

RE 4/2 - IRRADIATED



RE 4/2 - REFERENCE

