

Efficiency

CMS MUON *Preliminary*

GIF++

- ▼ plateau = 99%, WP = 7.08 kV, no hit bkg gamma rate, Eff(WP) = 98%
- ▲ plateau = 97%, WP = 7.11 kV, bkg rate (WP) = 0.3 kHz/cm², Eff(WP) = 96%
- ✚ plateau = 94%, WP = 7.09 kV, bkg rate (WP) = 0.8 kHz/cm², Eff(WP) = 93%
- plateau = 93%, WP = 7.10 kV, bkg rate (WP) = 1.6 kHz/cm², Eff(WP) = 93%
- plateau = 93%, WP = 7.13 kV, bkg rate (WP) = 2.0 kHz/cm², Eff(WP) = 92%

30% CO₂ + 1.0% SF₆

Test Beam in April+July+August 2023

before irradiation

1.4 mm double gap RPC

Threshold = 60 [fC]

0.6

0.4

0.2

0

6000 6200 6400 6600 6800 7000 7200 7400 7600

HV_{eff} [V]

0.8

1.0

1.2

1.4