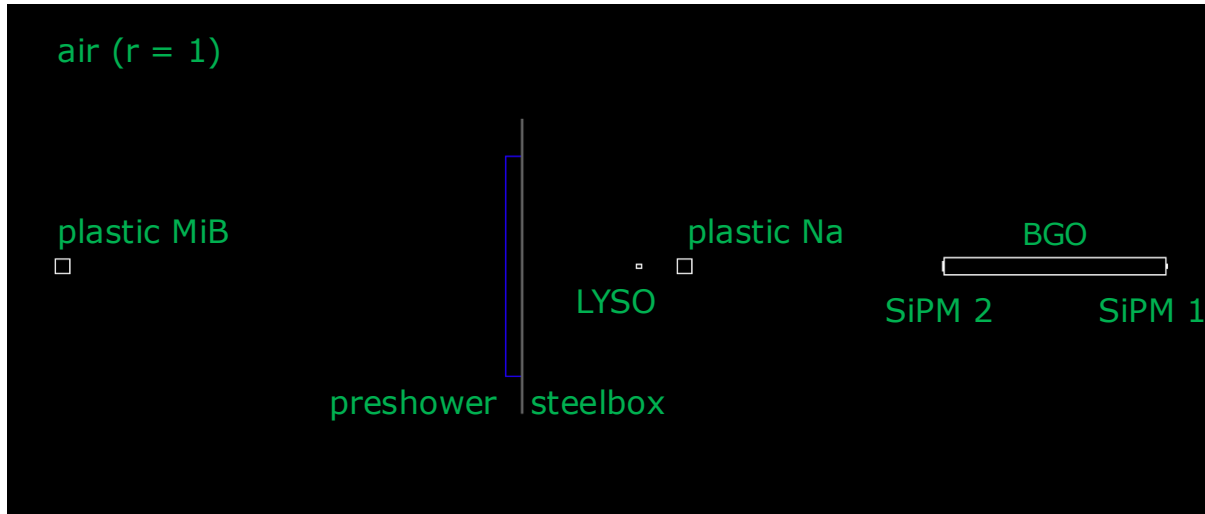

D. Boccanfuso, F. Cirotto, A. D'Avanzo, C. Di Fraia

GEANT4 SIMULATION REPORT

FCC Napoli weekly meeting, 07 February 2024

NEWS

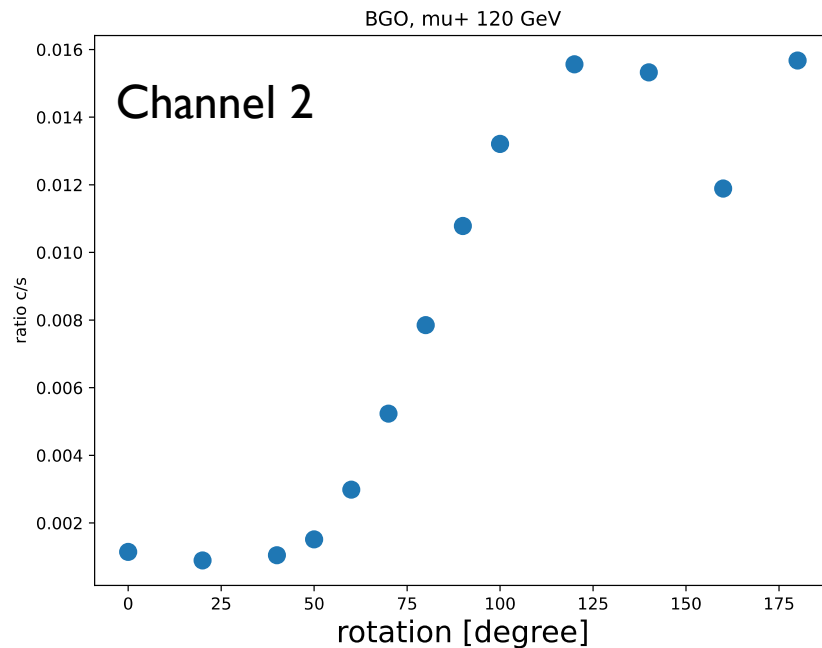
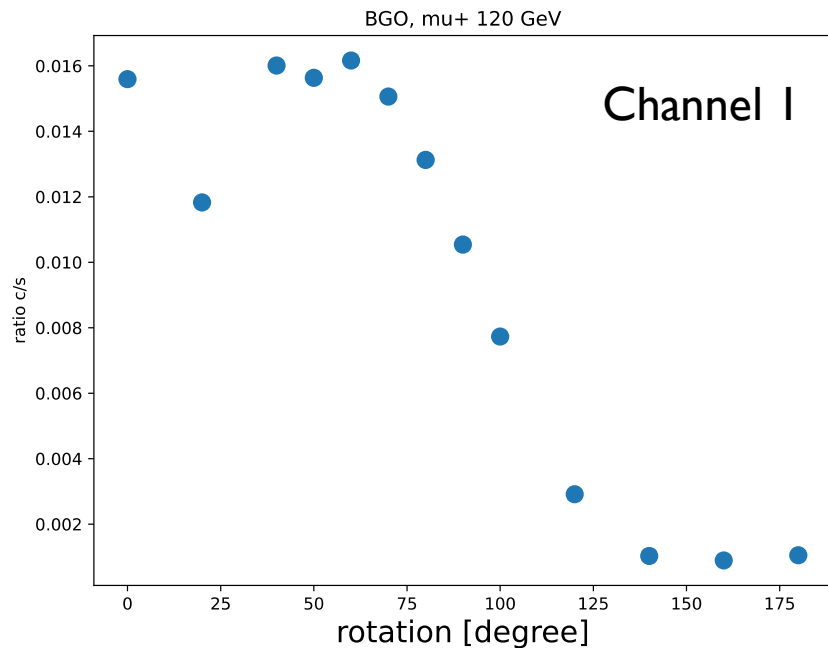
- Added position and direction of photons reaching CH1 and CH2
- Disabled borders between crystal and filter as Daniele's branch
 - Simulation faster than before
 - Output files don't get totally corrupted, but some vectorial branches get corrupted
- Produced runs with electrons



[link to relative distances](#)

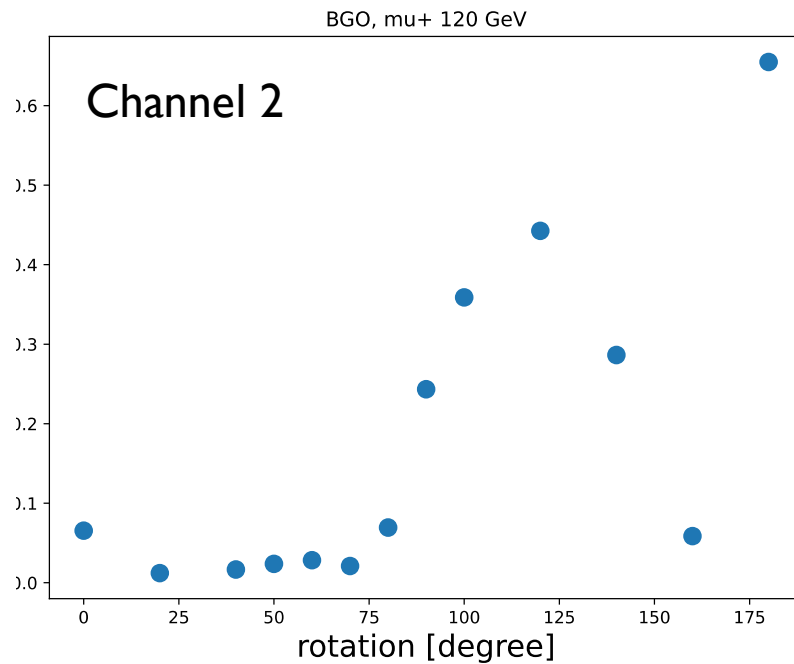
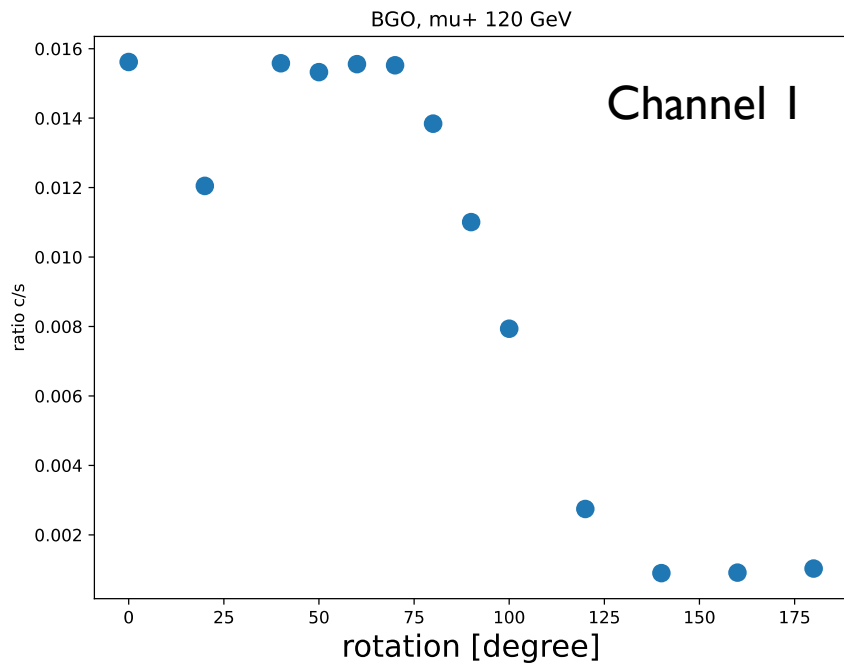
AVERAGE C/S IN SIPM: NO FILTER

➤ mu+ at 120 GeV, $\sigma_{\text{beam}} = 0.25$ cm, 100 events



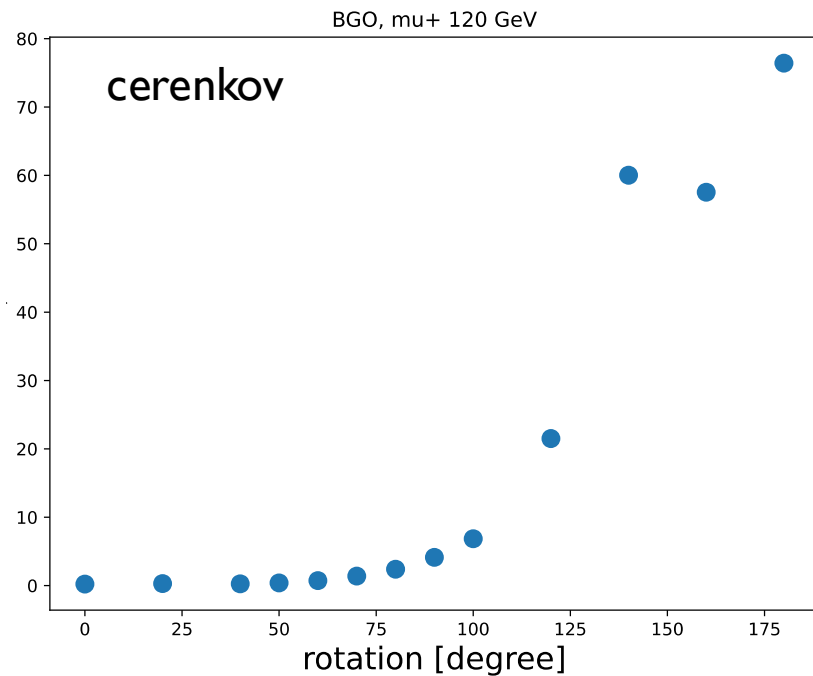
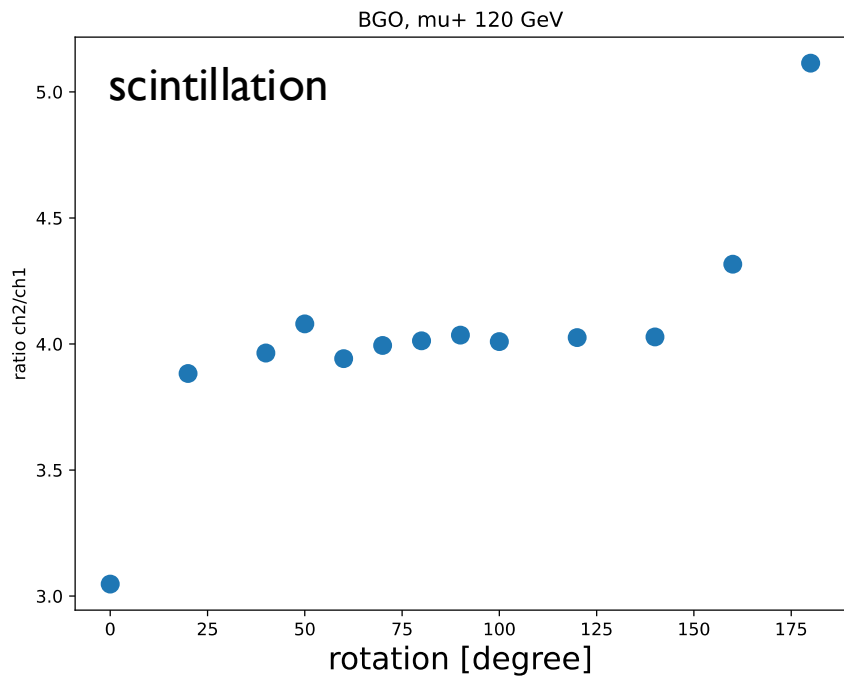
AVERAGE C/S IN SIPM: FILTER

➤ mu+ at 120 GeV, $\sigma_{\text{beam}} = 0.25$ cm, 100 events



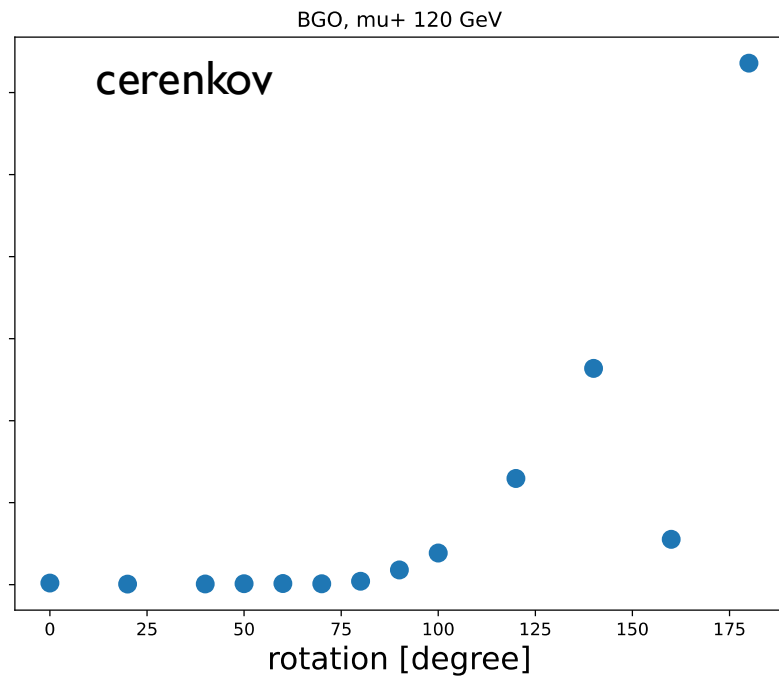
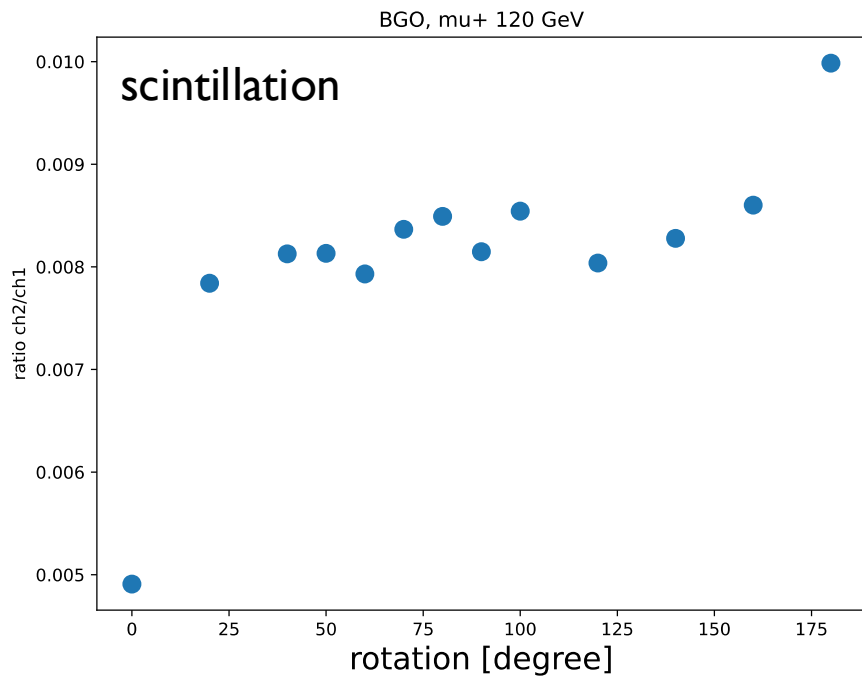
AVERAGE CH2/CHI IN SIPM: NO FILTER

➤ mu+ at 120 GeV, $\sigma_{\text{beam}} = 0.25$ cm, 1k events



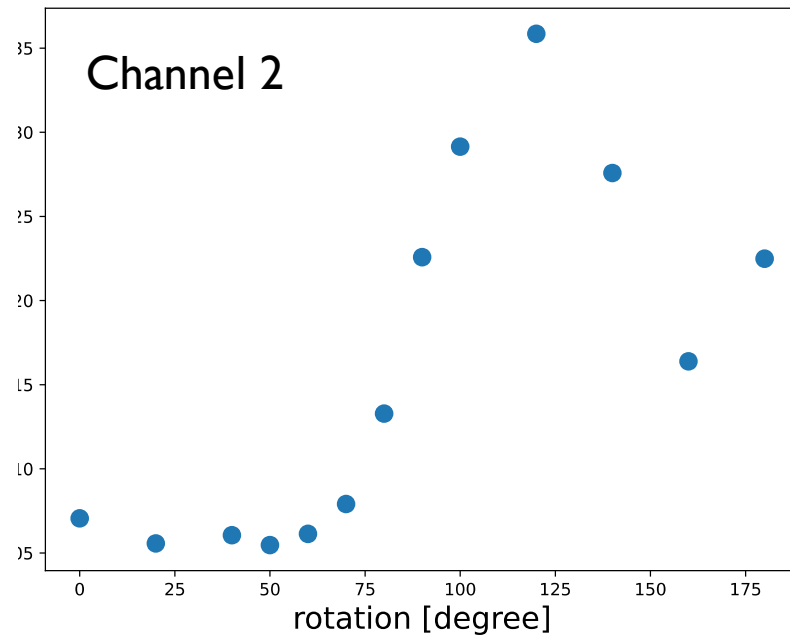
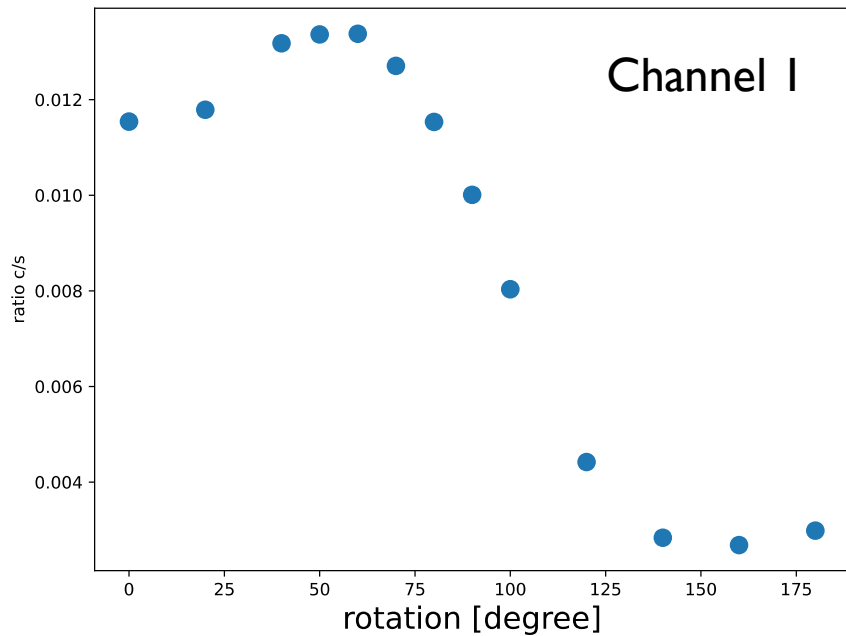
AVERAGE CH2/CHI IN SIPM: FILTER

➤ mu+ at 120 GeV, $\sigma_{\text{beam}} = 0.25$ cm, 100 events



AVERAGE C/S IN SIPM: FILTER

➤ e+ at 10 GeV, $\sigma_{\text{beam}} = 0.25$ cm, 100 events



AVERAGE CH2/CHI IN SIPM: FILTER

➤ e+ at 10 GeV, $\sigma_{\text{beam}} = 0.25$ cm, 1k events

