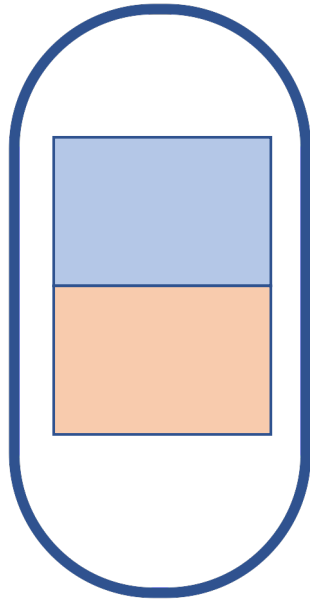


Cosmic ray background (beam intensity independent)



Fiducial

Background

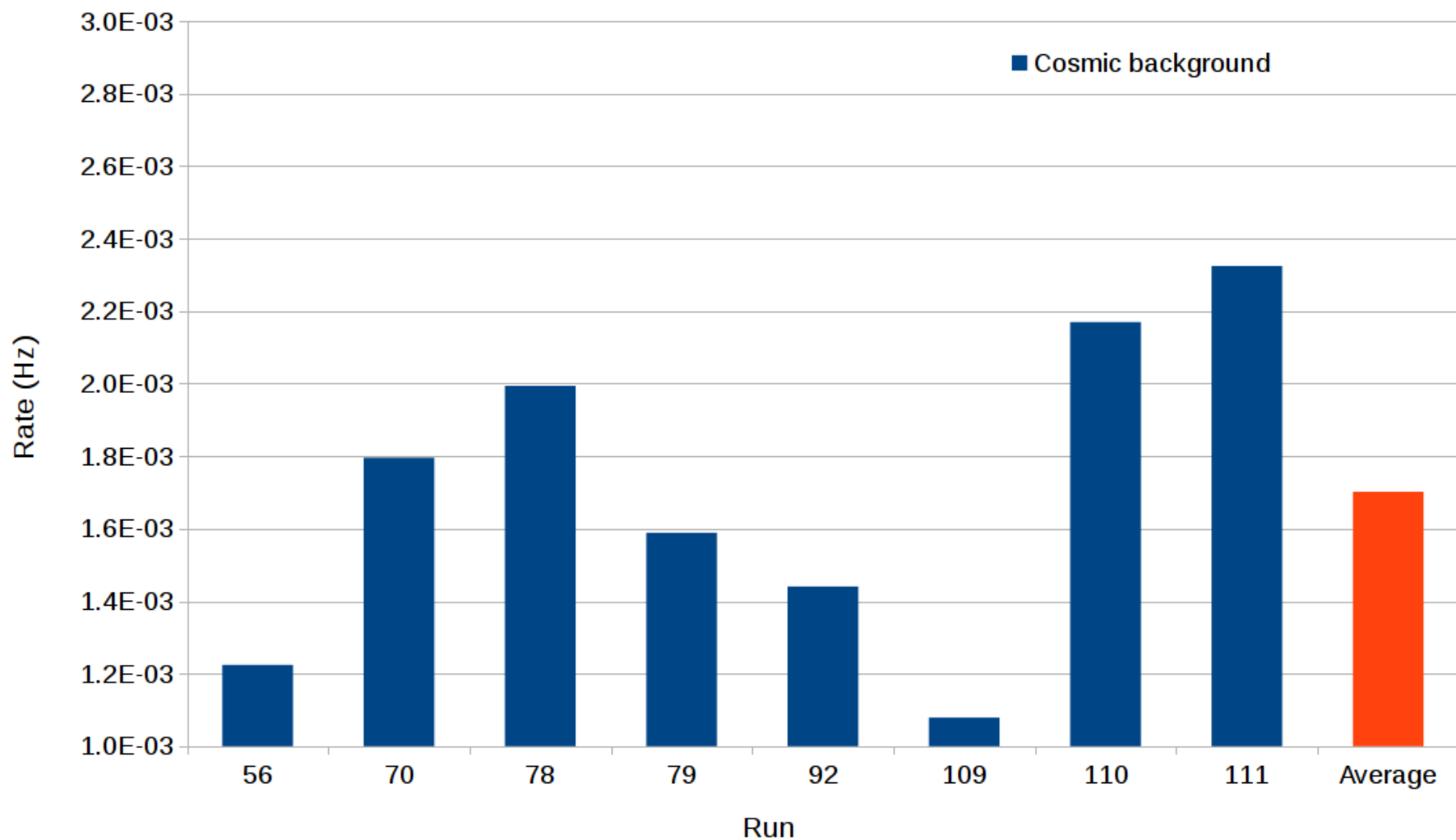
$$N = (\text{Fiducial} + \text{Background})/2$$

T = run time

Trig = triggers

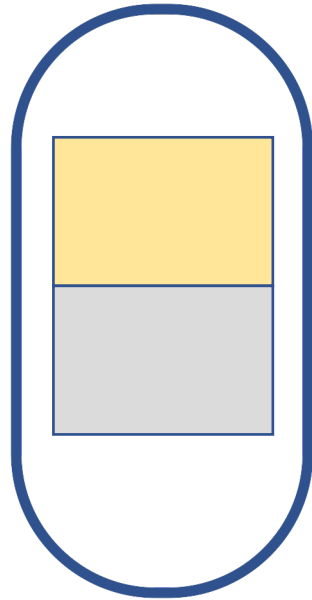
$$\text{Rate} = N/(T - 10 * \text{Trig})$$

Used runs 56, 70, 78, 79, 92, 109, 110, 111



Cosmic ray background average = 1.7E-3 Hz

Beam induced background (calculated at $I = 50 \mu\text{A}$, $E = 4 \text{ MeV}$)



Fiducial

Background

$$N = (\text{Fiducial} - \text{Background})$$

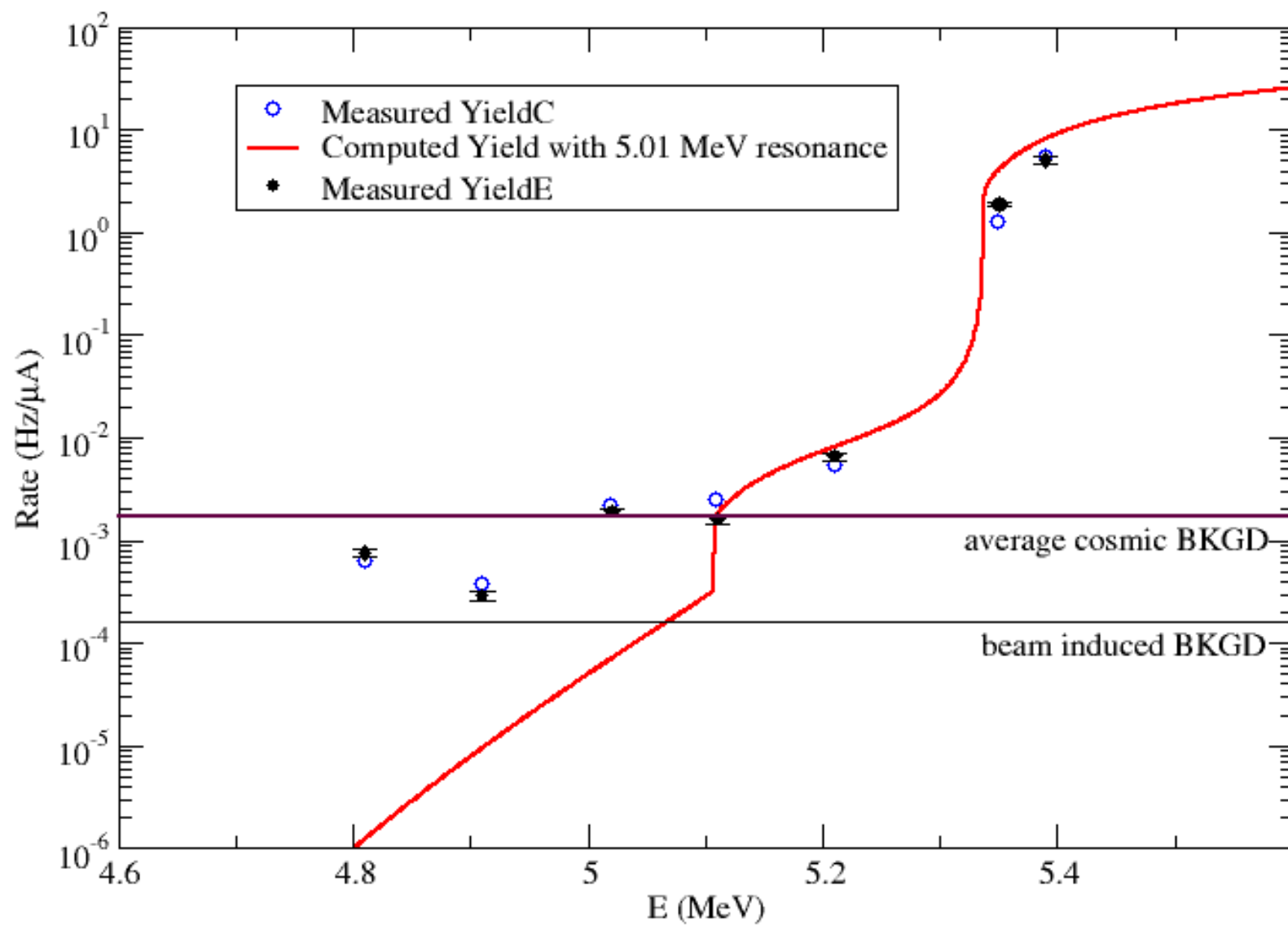
T = run time

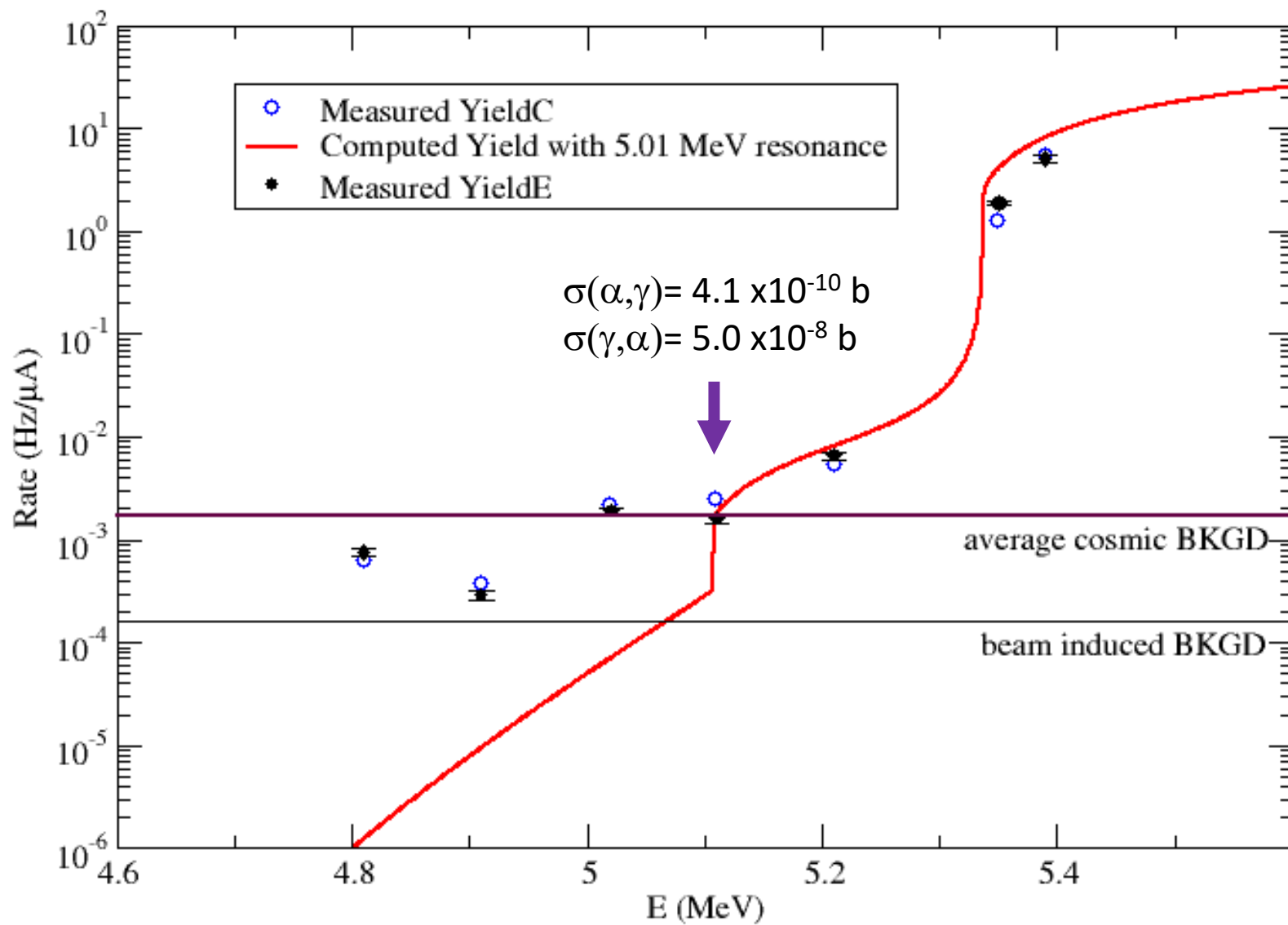
Trig = triggers

$$\text{Rate} = N / (T - 10 * \text{Trig})$$

Used run 91

Beam induced background = $8.3 \times 10^{-3} \text{ Hz}$, $1.7 \times 10^{-4} \text{ Hz}/\mu\text{A}$





	Rate (Hz) @ 50uA	Rate (Hz/uA)
Average rate fiducial @ 4.81 MeV	3.12E-2	6.25E-4
Average rate fiducial @ 4.91 MeV	1.83E-2	3.66E-4
Beam induced BKGD	8.30E-3	1.66E-4
Average Cosmic BKGD	1.70E-3	1.70E-3