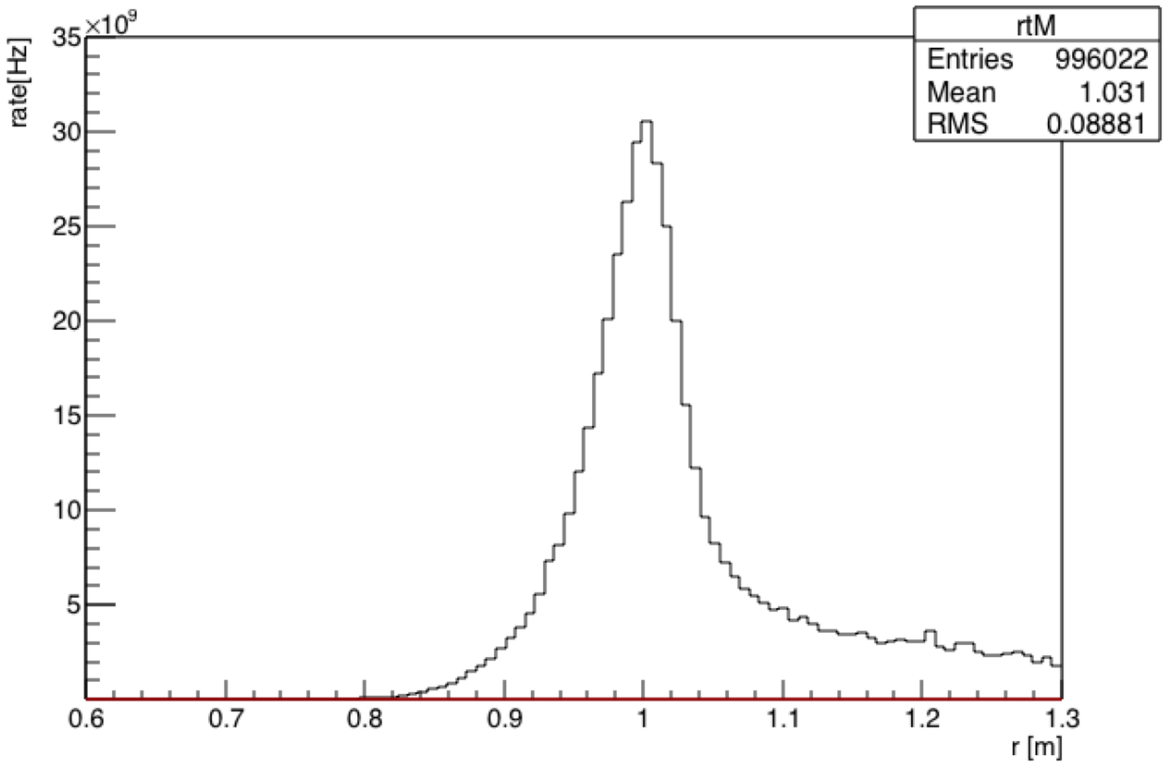
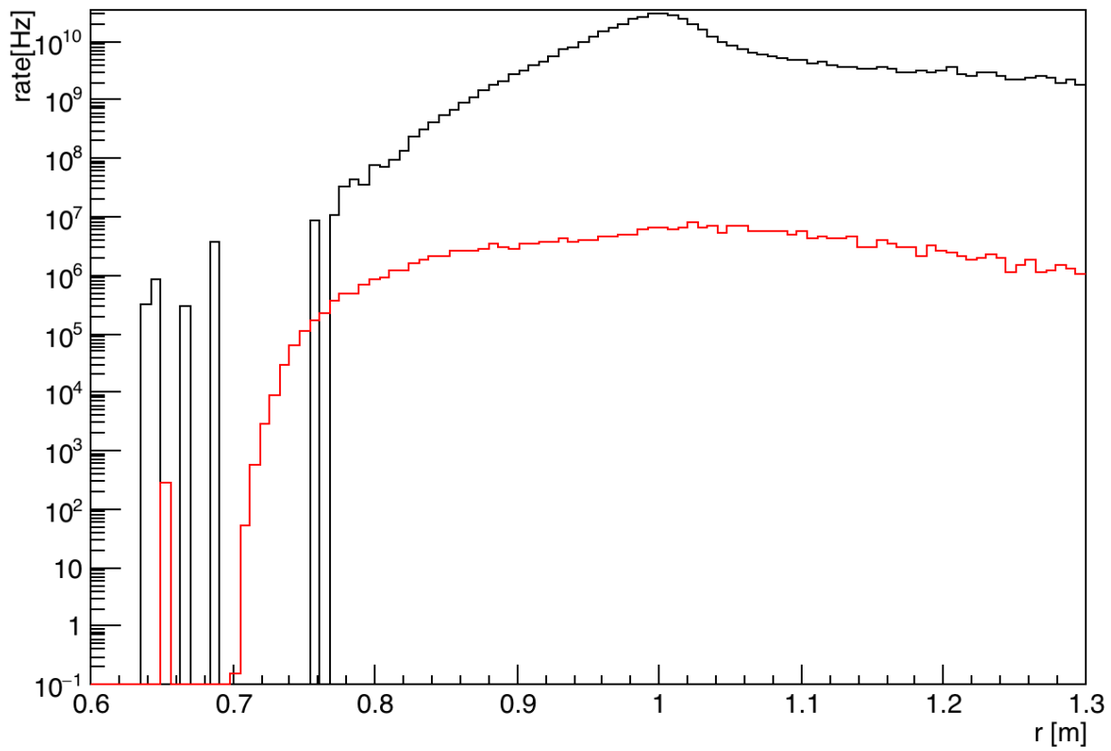
Pi- rates in remoll/CB generator xCheck

Ciprian Gal UVa

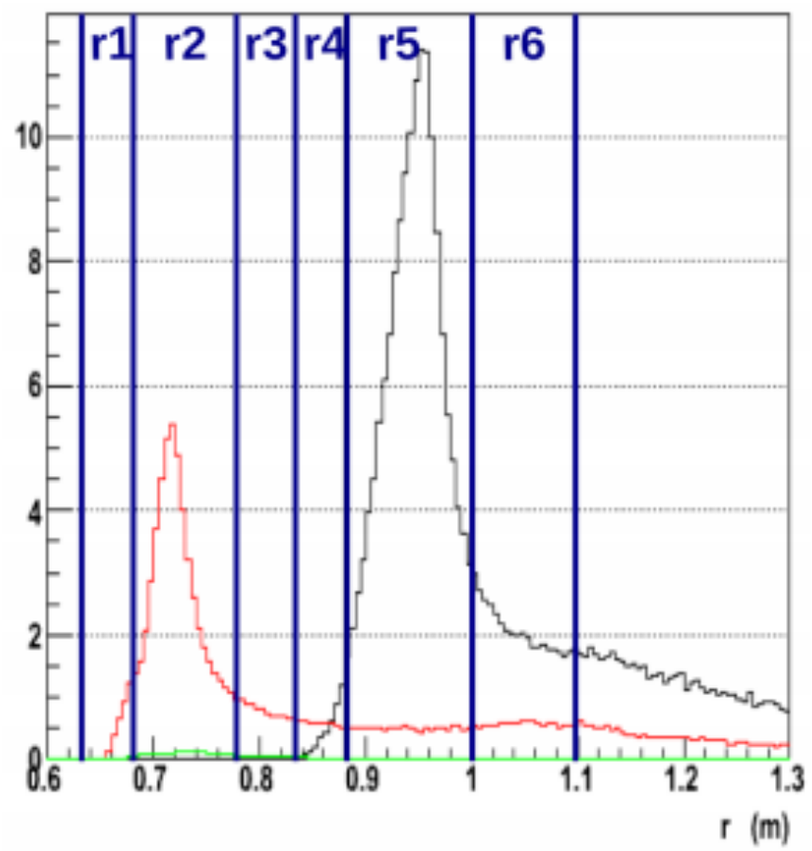
Pi- simulation





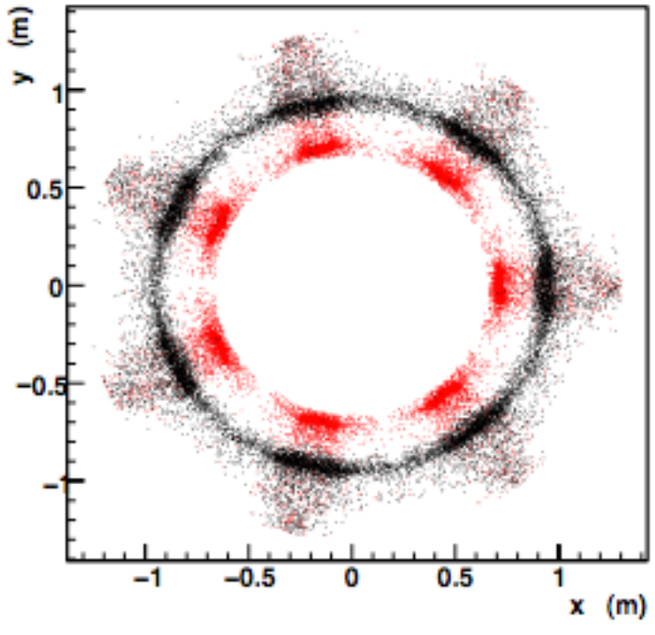
- ran 1M events for both Moller and pion generators with remoll
- extracted the rates in using
  - collimation cut 1
  - Z>26 cm
  - detector id 28 (quartz plane)
  - particle ID

Pi- simulation

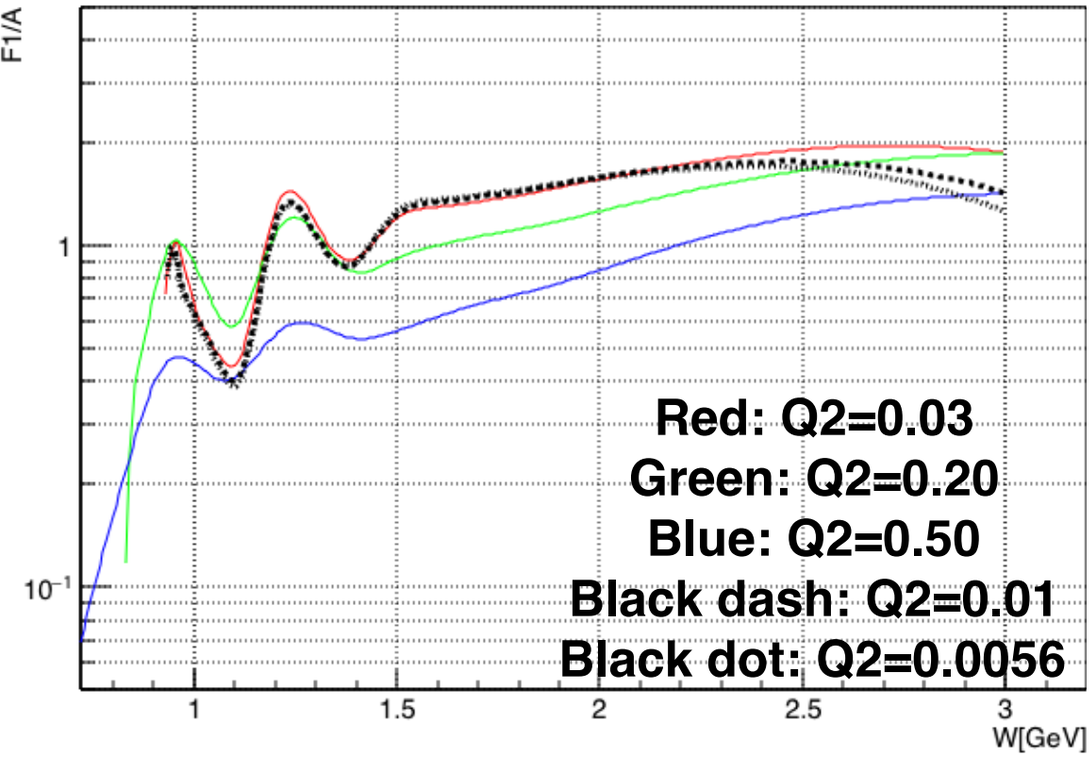


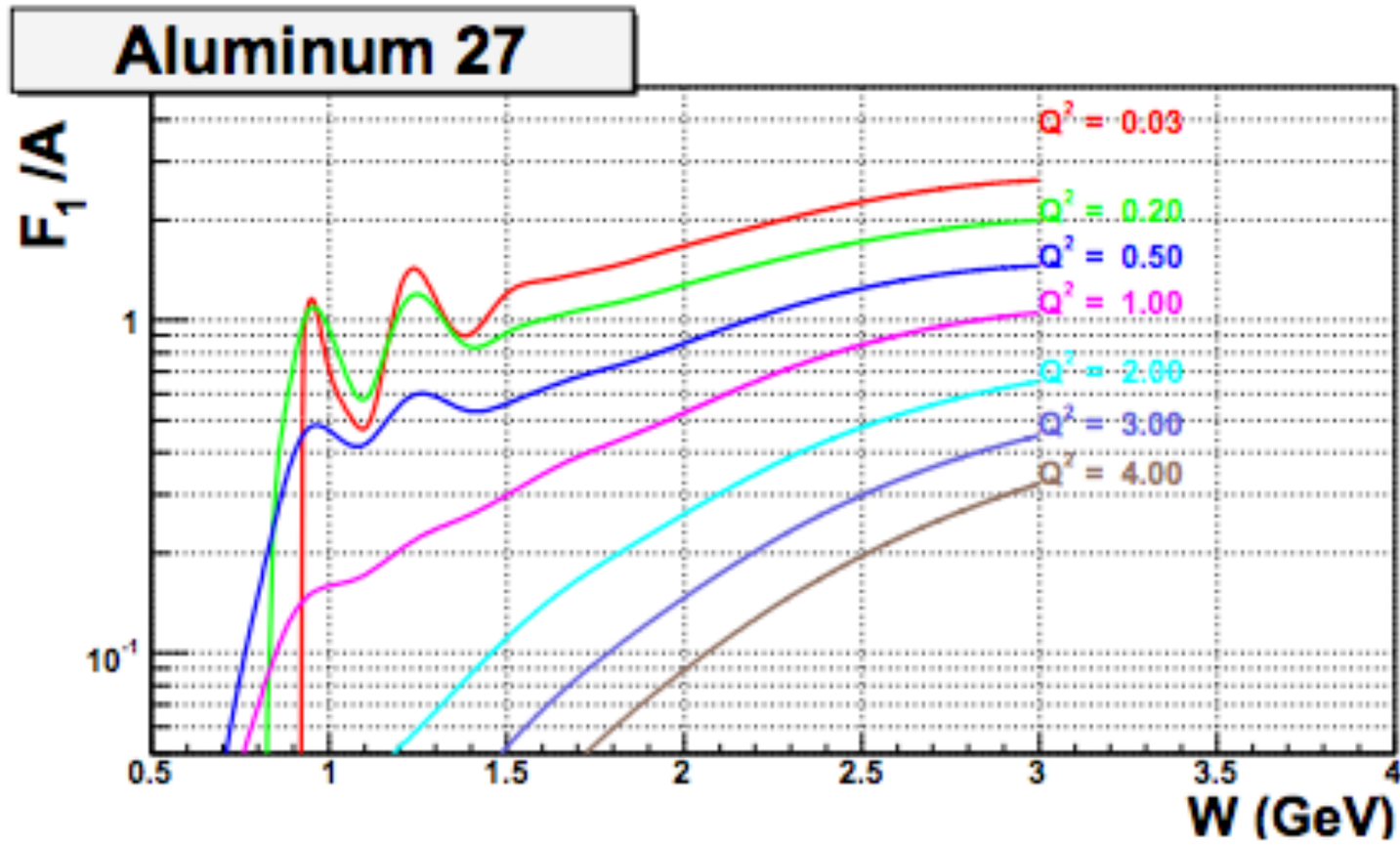
ring	ring radius	Moller	pi -	ratio pi-/Moller
1	0.65-0.68	3.04E+05	2.90E+02	9.53E-04
2	0.68-0.78	5.60E+07	1.44E+06	2.58E-02
3	0.78-0.83	7.20E+08	7.52E+06	1.04E-02
4	0.83-0.935	3.68E+10	4.61E+07	1.25E-03
5	0.935-1.04	3.00E+11	8.90E+07	2.97E-04
6	1.04-1.1	6.99E+10	5.95E+07	8.52E-04

- for the rates in the previous slide I did an integration along r
- the ring sections were taken from the MIE figure on the left expect for ring 5 which Seamus gave to me
- will implement a better integration taking phi into account today



Sum of Inelastic and Quasielastic





- updated the curves as requested from last meeting
- there does not seem to be any major issue with the generator implementation
  - the “dip” at W>2.5GeV is present particularly for the Q2<0.2GeV2