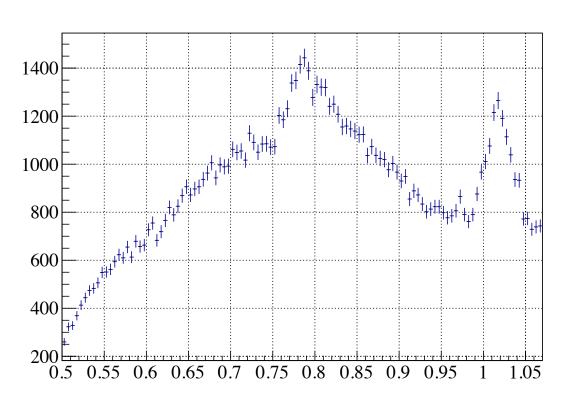
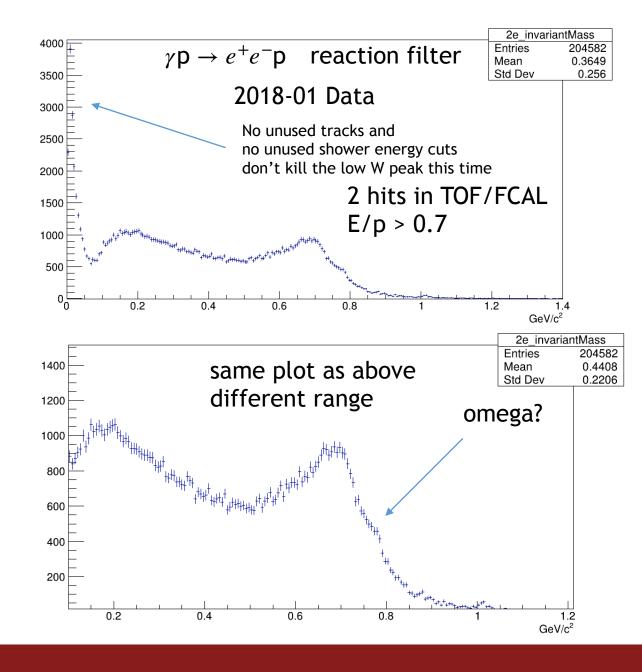
First 3 slides: 2018-01 data, e+e-p exclusive reaction. Trying to recreate Lubomir's plot of the omega and phi.

Plot from Lubomir for M(e+e-)

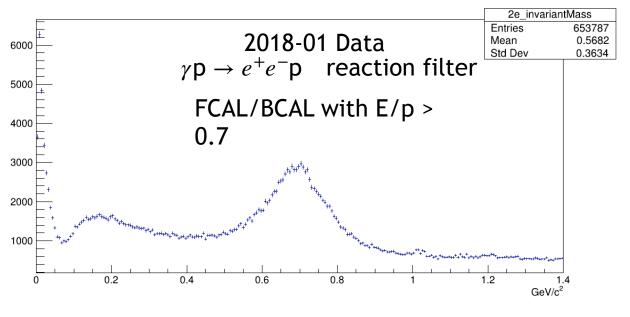


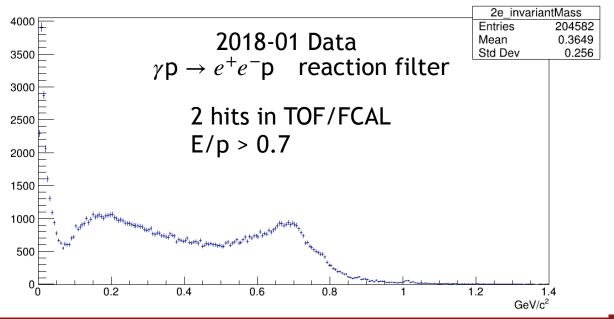


## Maybe just need to allow BCAL?

Now allowing BCAL tracks 2000

From previous slide (no BCAL tracks allowed)





## 2018-01 Data $\gamma p \rightarrow e^+e^-p$ reaction filter 2e invariantMass 3708190 Entries 30000 Mean 0.6665 Allow BCAL + FCAL 0.2456 Std Dev events, but no 25000 E/p cuts 20000 15000 10000 5000

Lubomir says that the peak "is shifted because it assumes electron mass instead of pion which is what you are actually seeing without the cuts."

8.0

1.2

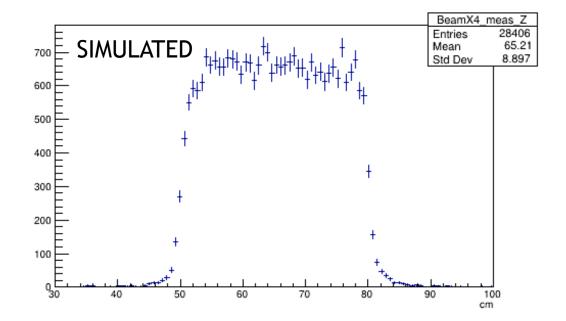
GeV/c<sup>2</sup>

0.6

0.2

0.4

Now we are looking at missing proton 2018-08 data, post MVA analysis: these are all good electron events.



I used a different method to calculate  $sqrt(x^2 + y^2)$  for the MC plots and they don't match the data on the right.

I need more time to go back and calculate them the same way. I will show the corresponding MC plot Monday.

