12. The paper ends with "favor Regge pole model and quark counting rule while disfavoring...". Is this not only true for certain kinematic regions? For sure, the counting rule is not valid for theta not around 90 degrees. Also the paper stressed the importance of meson photproduction for nucleon's QCD models. However, it made no real discussions about how this is true (a few more references at least would help), and explain why the "Reggie" regime is necessary – one can make a case for that, but it does seem to have been made in the paper. English needs improvement

A few detailed comments in red.

Abstract:

...the exclusive pi0 photoproduction cross section via Dalitz decay and e+e- pair conversion mode on a hydrogen target in a wide kinematic range…

? The final state pe+e-X(gamma) was measured after interaction of the tagged photon beam over an energy range spanning the "resonance" to "Regge" regimes, i.e. E=1.25-5.55GeV.

-we are not sure if this sentence fits an abstract:

✓ The final state particles p, e +, e – were detected while the photon was not detected. The π 0 is identified by analyzing the missing mass of proton.

? This new data quadruples the world database above E = 2 GeV. Our data appear to favor the Regge pole model and the quark counting rule while disfavoring the Handbag model.

OK Is this strong enough for PRL? They require something novel/high impact and of general interest. It could be that the measurement via e+e- is novel, if so this should be emphasized more.

"This experiment is a unique opportunity to bridge resonance and high-energy, in particular..." is this true? of course

rewrite "The model of Laget is presumably (the authors should know!) valid within the full angular range($\theta = 0^\circ$ – 180°) [5] while the others are good for different ranges of the forward direction, *i.e.* from $|t| = -t$ min at $\theta =$ 0 to $\theta = \pi/2$, where t is the squared four-momentum transfer." We do not understand this; also you should not change from degrees to radians mid stream.

"for the full CLAS energy range, i.e. E> 2.8 GeV" surely there is an upper limit! E < 5.5 GeV ?

? First paragraph page 2 ??

Second paragraph – need to combine first 2 sentences, don't need previous and existing "and subsequent Dalitz decay" it is not subsequent to conversion reactions.

"Lepton identification was based on conservation of mass." ?was it? conservation of the π^0 mass

OK Notes : More recent Mainz results going up to W=1.9GeV should be from Aldarson et al(2 of the reviewers are authors!) Also A2 not mentioned in text along with other measurements 2nd last paragraph page 2

done by Igor ⇒ figure will change $\frac{d\sigma}{dt}$ |