

Kijun,

I have read through the draft of your  $\pi+n$  paper. For the most part I have no issues with the scientific content of the manuscript, but there are many grammar, style, and syntax issues that will definitely need to be addressed before this paper can be submitted. My comments on the draft are given below. Let me know if you have any questions.

Regards,

Daniel

*Here is our response. Note, if we do not reply to individual comments, we accept those comments and make the changes.*

\*\*\*\*\*

General:

- Let  $c=1$  throughout as you handling of speed of light units is not consistent throughout this paper.

*Answer: Defined  $c=1$*

- You use four different notations for the hadronic plane angle throughout this paper,  $\phi$ ,  $\phi_{\pi^+}$ ,  $\phi_{\pi}$ , and  $\phi_{\pi^*}$ . Please go through this paper and use consistent notation.

*A: Done*

- You have problems pretty much every time that you use quotation marks. Please fix throughout the document. The opening quotation marks should look like "66" and the closing quotation marks should look like "99".

*A: We eliminated all quotation marks*

Page 1:

- Abstract.

- Line 9. Use "... are taken as the model ...".

- Line 14. Use "... non-quark contributions ...".

- Line 15. Use "... with quark model predictions."

- Line 7. Use "On a fundamental ...".

- Line 11. Use "... constituent quark model (CQM) ...".

- Line 12. Use "... hadron models. However, recent developments ...".

- Line 13. I suggest "... the predictions of the spectrum of  $N^*$  and  $\Delta^*$  states, ...".

- Line 19. Use "... data that can be used ...".

- Line 23. Use "... decade that have enabled ...".

- Line 28. Use "...  $\Delta(1232)$ , in  $\pi^0$  electroproduction on the proton with ...".

- Line 36. Use "... in the second resonance ...".

- Line 37. Use "... 1.6~GeV allow for precise measurements of the ...".

- Line 39. I think that you need to add a reference here on the Roper electrocouplings.

- Line 39. Use "... is the first radial ...".

- Line 44. Use "Following these breakthroughs, the process  $\sigma(e^+p \rightarrow \pi^+\pi^-)$  was ...".
- Line 46. Use "... reaction model was developed ...".
- Line 47. Use "... amplitudes for the resonances  $N(1440)\frac{1}{2}^+$  and  $N(1520)\frac{3}{2}^-$  from this channel. The two-pion results ...".

*A: all done*

- Line 54. The paragraph beginning here does not seem like it belongs, almost a non-sequitur. I would recommend that you drop it altogether.

*A: we eliminated that paragraph*

- Line 59. "The results of his effort ..." ... What effort are you talking about?

*A: we changed the wording*

Page 2:

- Fig. 1 caption.
- Line 62. Spurious ")" after "[25]".
- Line 64. I suggest "... to the resonance structure, ...".
- Line 65. I suggest "... at low  $Q^2$  given contributions to the transition form factors of the ...".

*A: we changed the wording*

- Line 67. "... but fall off more rapidly with increasing photon virtuality  $Q^2$ ." You need a reference here.
- *A: we added two references*
- Line 72. Use "This reaction proceeds mostly through a magnetic dipole ...".
- Line 77. Use "pion-cloud contributions ...".
- Line 78. Put "[28-32]" after "dynamical reaction models".
- Line 80. Use "baryons interactions in the ...".
- Line 83. Use "... with a spectator di-quark [33-35]." (Note the moved reference.)
- Line 85. Use "... are illustrated in Fig. 1." (Drop the "respectively ...".
- Line 94. Use "coupled-channel".
- Line 96. Here you use  $W=2.1\sim\text{GeV}$ , but everywhere else you use  $2.0\sim\text{GeV}$ .
- Line 100. Use "...  $N(1675)\frac{5}{2}^-$  and  $N(1680)\frac{5}{2}^+$ , that a ...".
- Line 101. Use "single-channel".
- Line 110. Use "liquid-hydrogen".
- Line 125. Use "four-momenta".
- Line 126. Use "four-momentum".
- Line 129. Use "four-momentum".

*A: we accepted all*

Page 3:

- Line 136. Use " $z$ -axis".
- Line 137. Use "three-momentum".
- Line 138. Use "...  $\phi_e$ ), where  $\phi_e$  is the electron azimuthal lab angle."

*A: we accepted all*

- Eq.(5). Inconsistent differential notation. You have  $d^5\sigma$  on the left side, which

is correct.

However, you have  $\sigma$  on the right side which is not. It really should be  $\sigma^2$ , but

$\sigma$  is typically used as a "short hand".

*A: we changed the notation accordingly*

- Line 150. Use "... and the operation performance of CLAS are described ...".
- Line 160. Inconsistent spelling of Cherenkov in this document. Pick one and use it consistently throughout.

*A: done*

- Line 178. Use "... conducting coils that was used to shield the drift ...".
- Line 180. Use "... from Moller scattering processes in the target".
- Fig. 3 caption. Too much information included here that is not necessary. I suggest "... 6 independent spectrometers (sectors) each equipped with 3 regions of drift chambers. Time-of-flight scintillators cover the entire ...".

*A: changed text accordingly*

- Line 189. The SI unit for seconds is "s" not "sec".
- Line 193. Use "... 7-8 nA current and an energy ...".
- Line 194. Use "5-cm-long liquid-hydrogen".

*A: accepted all*

Page 4:

- Line 202. Use " $2250 \pm A$ ".
- Line 211. Use "reconstruction procedures".
- Line 224. Use "... and a CC hit in the ...".
- Line 231. Use "... in the calorimeter ( $E_{dep}$ ) and ...".
- Line 236. Use "... to as the "sampling fraction" ( $\alpha$ ) ...".
- Line 251. Use "... resulting in much less energy deposited ...".
- Line 253. Use "... eliminated by energy cuts.

*A: accepted all*

- Line 260. Use "... deposited in the EC ( $EC_{tot}$ ) ...".
- Line 261. Choose consistent notation in this section. Sometime you use italics and sometimes not.

Be consistent with  $E_{dep}$ ,  $E_{tot}$ ,  $EC_{tot}$ , and  $EC_{inner}$ . Note also that sometimes you

use a subscript "tot" and other times "total". Be consistent.

*A: implemented consistent notation*

- Line 263. Use "... after all cuts were applied ...".
- Line 268. How can you detect half a photoelectron? Also does 2.5 really mean 25?

*A: We do mean 2.5 p.e. , but added "average" to make it clear*

- Line 274. Use "... bins in  $\theta_{\pi}$  and  $\phi_{\pi^*}$  to take into account ...".
- Fig. 4 caption.
- Line 2. Use "vs."
- Line 3. Use "... additional electron EC fiducial cuts, ...".

- Line 5. Use "... in the CC."

*A: made the changes*

Page 5:

- Line 280. Use "\$z\$-vertex \$v\_z\$".
- Line 282. Use "\$v\_z\$".
- Line 283. Use "\$v\_z < -20\$~cm resulted from electrons ...".
- Line 284. Use "... which was located ...".
- Line 290. Use "An average time resolution of ...".
- Line 291. Use "The vertex start time was needed ...".
- Line 292. Use "microbunch" or "micro-bunch".
- Line 299. Use "... TOF counters, with the particle ...".
- Line 302. Use "... charged particle  $\beta$  versus momentum. ... Precise timing calibration was ...".
- Line 306. Use "was applied".
- Line 307. Use "... pions, the missing neutrons ...".

*A: made all changes*

- Pion id: What do you do for PID when your particle bands overlap in momentum?
- *A: we added some text and reference to make that clear*
- Line 311. Use "The final state neutron was not ..."
- Line 316. Use "\$ep \to e'\pi^+n\$ was then ...".
- Line 321. Wrong subscript on  $\theta$ .
- Line 325. Use "Section V B".
- Line 325. You talk about background apparent below the MM peak. There is no background below the peak.  
I am confused.
- Fig. 5 caption.
  - Line 1. Use "\$x\$ and \$y\$".
  - Line 3. Use "\$z\$-vertex".
  - Line 4. Use "\$y\$ target position was corrected."
- Line 328. Use "... The background was subtracted as discussed in Section VI B."

*A: made all changes*

- Line 330. Use "\$ep \to e'\pi^+n\$".
- *A: changed to  $ep \to e'^{\prime}\pi^0$*
- Line 331. Use "... not further considered."
- Line 333. Use "... bin was fit with a ...".
- Line 334. Use "... cut was applied to separate ...".
- Line 336. Use "eliminated".
- Line 337. Use "These losses were corrected during the extraction of the unradiated ...".
- Line 339. Use "Section V B".

*A: made all changes*

Page 6:

- Fig. 6 caption.
  - Line 1. Use "... vs. ..." and "... for positively charged ...".

*A: done*

- Line 2. Use "Positively charged kaons ...". Note also that the dark shaded bands cannot be seen well on the left plot.

A: we think it is ok.

- Line 352. Use "The proton angle was ...".
- Line 354. Use "... system was well aligned .. we assumed it to be ...".
- Line 355. Use "... electrons were detected ...".
- Line 356. Use "... of the tracking chambers ...".
- Line 357. Use "... was less well known, ... shifts could result ...".
- Line 358. Use "... shifts in the reconstructed ...".
- Line 359. Use "... angle could then be ...".
- Line 362. Use "... torus coil, the corrections could be ...".
- Line 363. Drop the sentence "We attribute this significant effect ..." as you already stated this earlier.
- Line 365. The sentence "Electron momentum corrections ..." should begin a new paragraph. Use "The electron momentum corrections were derived from ...".
- Line 369. Use "... decreased to less than ...".
- Line 370. Use "... but could be up to 1.5\% ...".
- Line 371. Use "... were applied using ...".
- Line 373. Use "... momentum was corrected ...".
- Line 376. Use "... was determined ...".
- Line 377. Here it says the resolution was 28~MeV. However the fit in Fig. 6 shows 23.4~MeV. This should be consistent.
- Line 378. Use "... corrections were tested using ...".
- Line 380. Use a zero for the neutral pion superscript not a degree symbol.
- Line 381. Use "... particles was reconstructed ...".
- Line 384. Use "... particles were well determined ... were applied."
- Line 394. Use "... within the nominal full acceptance for ...".

Page 7:

- Fig. 7 caption.
  - Line 1. Use " $\int d\theta \frac{dN}{d\theta} \cos \theta$ " and "...  $\cos \theta$ , for different ...".
- Line 400. Use "... detector that could be ...".
- Line 410. Use "... can be seen, which is due ...".
- Line 416. Use "... cuts was used to ...".
- Line 418. Use "... photomultipliers or missing drift ...".
- Line 419. Use "The detector also contains regions ...".
- Line 420. Use "... no acceptance or with low ...".

Page 8:

- Fig. 8 caption.
  - Line 5. Use "... fiducial range for the ...".
- Fig. 9 caption.
  - Line 5. Use "... 34.5 $^\circ$ . The highlighted ...".

- Line 428. Use "... only charged particle ...".
- Line 429. Use "... chamber system and time-of-flight ...".
- Line 432. Use "... low angles was increased ...".
- Line 433. Use "... An example of fiducial cuts for the positively charged pions is shown in Fig. 9."

*A: we made all changes*

Page 9:

- Line 442. Use "... to determine the structure ...".

*A: done*

- Line 449. The  $Q^2$  dependence is expected to be smooth. Why?

*A: we eliminate sentence*

- Line 451. What does " $\Delta Q^2 = 0.2 \cdot Q^2$ " mean?

*A: it means that the bin size  $\Delta Q^2$  increases proportional to  $Q^2$ . This compensates partially for the reduce count rate at high  $Q^2$ .*

- Line 454. Use "... angled and the binning used ...".

*A: done*

- Table I caption. This caption is incomplete. What is meant by set 1, set 2, set 3?

*A: we added text to make that clearer. We used different binning to for some parts of the phase space to reduce bin size corrections in regions where the cross section changes rapidly (e.g. in polar angle), also to estimate systematic corrections.*

- Line 471. Use "... simulated missing mass resolution was compatible with the measured distributions."

- Line 493. Use "... that represents the combined ...".

- Line 499. Use "... was included ...".

- Line 502. Use "... each bin is given ...".

- Eq.(9). Add comma after equation.

- Line 510. Use "... bin in which the event was generated ...".

- Line 513. Use "... acceptance changed rapidly with ...".

- Line 514. Use "... and could even be zero ...".

*A: we made all changes*

Page 10:

- Fig. 10. As I look at the plot of  $Q^2$  vs.  $W$ , I wonder why you have not included a bin at lower  $Q^2$ ?

*A: We agree, we could have added one smaller  $Q^2$  bin, but it was not done. To make this useful for the global analysis the lower  $W$  range would also have to be included in the cross section extraction as for the previous data the lowest  $Q^2$  was comparable to the  $Q^2$  we analyzed here.*

- Fig. 10 caption.

- Line 1. Wrong subscript on  $\theta$ .

- Line 2. Use " $W$ ".

- Line 516. Use "... effects, cuts were placed to eliminate ...".

- Fig. 11 caption.

- Line 2. Wrong subscript on  $\theta$ . Also use " $2.2 \sim \text{GeV}^2$ ".

- What about the CC efficiency corrections and the scale of these corrections?

A: "The correction accounted for the efficiency of the CC for registering electron tracks based on the number of detected photoelectrons in each sector and defined in a fine grid of the  $\theta$  and  $\phi$  angles of the electron at the face of each CC. The average CC efficiency within the electron fiducial cuts for this analysis is 96%."

- Line 529. Need reference for "Exclurad".
- Line 538. Need reference for MAID03.
- Line 539. Use "... and its parameters were ...".
- Line 543. Use "... section and  $\sigma_{\text{modrad}}$  is ...".
- Line 545. How about "... and have a non-negligible effect on the ...".

Page 11:

- Fig. 11 caption.
  - Line 2. Use "... 1.96~GeV and fixed  $Q^2$  ...".
- Line 550. I suggest "... the same reaction that was published in 2008 from analysis of CLAS data [14]. This present work covers the same ...".
- Line 552. Use " $W$ ".
- Line 553. Use "... 1.68~GeV, allowing for a check ...".

A: *made all changes*

Page 12:

- Fig. 13 caption.
  - Line 1. Use "vs.".
  - What are the red, black, dotted, dashed, ... curves?

A: *we changed the colors to make all curves black solid lines*

- Line 558. Use "Legendre polynomials".
- Line 562. Use "Section VI B".
- Line 567. Use "Corrections were applied ..." Also, corrections to what?
- Line 569. Use "... sections were found to ...".

A: *made all corrections*

Page 13:

- Fig. 14 caption.
  - What are the red, black, dotted, dashed, ... curves?

A: *we changed the colors to make all curves black solid lines*

- Eq.(11).
  - What about factors for bin centering and radiative corrections?
  - Why did notation on left-hand side change from Eq.(5)?, *we corrected that*
  - Missing flux factor. *Now included*
  - Was flux factor evaluated at geometrical bin center or bin average?
  - Define the bin size elements in this equation.
- Line 581. Use "... bins, the full set of the resulting 37,000 differential ...".

A: *done*

- Line 583. "... available as supplemental material published ..." What do you mean

here?

*A: we deleted that sentence.*

- Line 586. Use "Database".

*A: done*

Page 14:

- Table II caption.

- Use "Average systematic uncertainties ...".

- Table II

- Use " $\epsilon$ " for first two sources.

- Use consistent number of significant figures for the different sources.

- Line 598. Use " $\mathcal{W}$ ".

- Line 601. Use "... cross section measurements to ...".

- Line 608. Use "... and the magnitudes of the assigned systematic uncertainties ...".

- Line 609. Use "Table II".

- Line 610. Use "... identification cuts, the vertex cuts for the electron, the fiducial cuts for the pion,

the missing mass cut, and the radiative corrections ...".

*A: made all changes*

- Section B.

- Is there a systematic associated with the number of  $\phi$  bins?

- It is not clear what, if any, kinematics dependence there is for the systematic uncertainties. Are

you assuming a single average value for each source?

*A: Every single cross section value has a systematic uncertainty assigned. The table only gives average values, individual systematic errors can be quite different depending on kinematics. We added text to make that clear.*

- Your systematics shown in Table II apply to the differential cross sections. How do you assign systematics to the separated structure functions which can be small?

*A: we do not assign systematics to the structure functions as these are not tabulated in the paper or in the data base. Our main experimental results are the diff. cross sections.*

- Fig. 15.

- This figure is out of order in the document and should come after Fig. 16.

- Caption line 2. Use "... The data set in the lower ...".

*A: we moved Fig. 15.*

- Line 614. Use "...well as the cuts on  $\pi$ , were varied within reasonable limits. The EC.

- Line 615. Use "... fraction cut led to a ...".

- Line 617. Use "... identification gave a 2.3% ...".

- Line 619. Use "... produced 2.2-4.5%, ...".

- Line 621. Use "The systematic uncertainty ... corrections was evaluated ...".

- Line 623. Use "We found variations ...".

- Line 625. Use "... corrections was estimated ...".

- Line 631. Use "... from  $K^+$  tracks misidentified ...".

- Line 632. Use "... to the identified  $\pi^+$  ...".

- Line 639. Use "... of 1.5% on average." (to agree with Table II).



*A: we made all the changes*

Page 15:

- Fig. 16 caption.
- Line 1. Use "...  $1.8 \sim \text{GeV}^2$  and  $W$  ...".
- Line 3. Use "The points at backwards angles are ...".
- Line 4. Use "... from the dynamical models."
- Line 642. Use "... have a 1% systematic uncertainty and ...".
- Line 657. Use "... expression of Eq.(13) yields ...".
- Line 661. Use "... beam energy, thus the terms ...".
- Line 665. Use "\$s\$-channel".
- Line 666. Use "Examples of the  $\cos \theta_{\pi}$  dependence of the extracted structure functions ...".
- Line 669. Use "... the MAID curves were based on parameterizations of background and resonance contributions from fits to previous ...".
- Line 674. Use "... that the parameterization used do not .. resonance contributions."

*A: we made all the changes*

- Line 677. Use "... obtained via fits to the ...".

*A: we deleted that text*

Page 16:

- Fig. 17 caption.
- Line 1. Use " $\gamma^* p \rightarrow n \pi^+$ ".
- Line 2. Use " $\cos \theta_{\pi}$ " and use "The error bars represent the statistical and systematic uncertainties added in quadrature. The solid and ...".
- Line 680. Use "Electrocouplings".
- Line 682. Use "... data within the Unitary Isobar Model (UIM) ...". Also add a reference here for UIM.
- Line 683. Use "... Relations (DR) approach.". Also add a reference here for DR.
- Line 689. Use "... are close to those used ...".
- Line 691. End the sentence with a period.
- Line 692. Use "... of the present data ...".
- Line 693. Use "... and the corresponding data ...".
- Line 694. Use "Ref. [14]".
- Line 700. Use "... and DR are described ...".
- Line 708. Use "...  $\rho$ , and ...".
- Line 711. Use "The resonance contributions are ...".
- Line 715. Use "... for the invariant amplitudes. They relate the real ...".
- Line 716. Use "Born terms".
- Line 717. Use "... and the integral over the imaginary ...".
- Line 718. Use "Taking into account the isotopic ...".
- Line 719. Use "... amplitudes that describe ...".

*A: we made all the changes*

- Line 720. The sentences on  $B_3^{(-)}$  make no sense to me. I have absolutely no idea what you are talking

about. This seems like some completely arcane detail that breaks the flow of this discussion. If it is

necessary to include, perhaps relegating it to a footnote is more appropriate.

- Line 722. Use "... 47]), the unsubtracted ...".

*A: we included this into a footnote. Although it is a technical detail, the reference may have some importance as the paper might be read by theorists/phenomenologists who may question how the dispersion relation were applied and how one unknown parameter was fixed in the fit.*

Page 17:

- Fig. 18 caption.

- Line 1. Use " $\gamma^*p \rightarrow n\pi^+$ ".

*A: done*

- Fig. 19.

- Plot (c) has a 40% disagreement between the extractions at  $W=1.65$  GeV. This is not within the systematics. What is going on here? It seems this disagreement is too big not to comment on.

*A: Good catch! the panel (c) had accidentally a copy of the new cross section from panel (b) included. The new panel has the corrected values included, and everything falls into place.*

- Caption line 1. Use " $\gamma^*p \rightarrow n\pi^+$ ".

- Caption line 2. Missing units on both listings of  $Q^2$ . Also use "... present work.".

- Caption line 3. Use "The solid and dashed ...".

- Line 737. Use "... shows the  $W$ -dependence of the total cross ...".

- Line 738. Use "As is mentioned in ...".

- Line 741. Use " $\sigma_{\text{tot}} = 4\pi D_0^{T+L}$ ".

*A: made all changes*

Page 18:

- Table III.

- I am not sure what the  $\chi^2$  here actually means. These data are not used in the fits for either

the UIM or DR, so is  $\chi^2$  just a measure the difference between the data and the predictions of these calculations?

*A: the  $\chi^2$  values are indeed the results of the fits to the cross sections using UIM and DR approaches. They are therefore significant.*

- Caption line 2. Use "... within the UIM and DR approaches.".

- Caption line 5. Use "... present work and ...".

- Line 742. Use "... of the global fits ...".

- Line 746. Use "For a more complete ...".

- Line 747. Use "... also the differential cross ...".
- Line 750. Use "all 3- and 4-star resonances ...".

*A: made all changes*

- Line 751. The listing of all the states in the text feels awkward. I recommend to list them either  
in a table or as an "equation".

*A: we took them out, as the "all 3- and 4-star resonances.." should be sufficient to identify all resonance included in the fit.*

- Line 755. Use "... of the fourth resonance region ...".
- Line 756. Use "... included the  $\Delta(1905) \dots 1950) \frac{7}{2}^+$ , which have ...".

*A: made the changes*

- Line 757. Use "... seen in  $\pi$  photoproduction.". You need a reference here.

*A: we deleted the sentence*

- Line 758. Use "... the resonances, we used ...".
- Line 762. Use "... regions, including their ...".
- Line 763. Use "... data from Ref. [14].".

Page 19:

- Line 778. Use "... region, the present data did not allow us ...".
- Line 783. Use "... are the averaged values ...".
- Line 792. Use "... background of the UIM ...".
- Line 797. Use "... and the quark model ...".
- Line 799. "GeV" should be in roman font in the dipole form.
- Line 803. Use "... as the model uncertainties ...".
- Line 818. Use "... by the quark models, ...".
- Line 819. Use "... from the experimental data.".
  - Line 825. Use "... as a reference, ...".

*A; made all changes*

- Line 840. "Also all models predict significant dominance of the  $A_{1/2}$  amplitude over  $A_{3/2}$  with increasing  $Q^2$  ..." I do not see this in Fig. 21. Here I see the magnitudes for both transverse electrocoupling parameters going to zero with increasing  $Q^2$ .

*A: yes, but the Fig. 22 shows this much more clearly in the helicity asymmetry, that the models go all towards  $A_{hel} = 1$ , while the data show a much more shallow trend with only a slight positive slope for  $Q^2 > 2$ .*

- Line 848. Use "... [65], can be ...".
- Line 855. Use "...  $Q^2$  points, finite values ...".
- Line 856. Use "... extracted, while at ...".
- Line 859. Use "... magnitude, is negative but with finite values ...".
- Line 860. Use "... to the predictions ...".
- Line 871. Use "... data points were obtained.".

*A: made all changes*

Page 20:

- Fig. 20 caption.

- Line 4. Use "... to the quark model ...".
- Line 873. Use "... provides complete ...".
- Line 882. Use "coupled-channel analysis".
- Line 883. Use "we subjected the differential cross section data". The word "subjected" is not appropriate

here. You could say "In the absence of a coupled-channel analysis framework for electroproduction channels,

we employed a single-channel energy-dependent partial wave analysis of the differential cross section data

to extract ...".

- Line 888. Use "... true for this type of analysis, ...".
- Line 889. Use "model sensitivity".
- Line 896. Use "... dispersion relation approach."

*A: made all changes*

Page 21:

- Fig. 23. This figure is placed out of order and should come before Fig. 22.
- Fig. 23 caption.

*A: We do not agree. Fig.23 is in the right place. The Fig. 20, 21, 22, and 23 show results for the lowest mass state N(1675), then N(1680), then N(1710), and the figures are organized in this way.*

- Line 2. Use "The legend is as for ..".

*A: done*

Page 22:

- Line 920. Use "intriguing result".
- Line 932. Use "liquid-deuterium".

*A: made the changes*

Bibliography.

- The bibliography format needs attention to put it into proper form.
- Do not include preprint numbers for published papers. *done*
- "et al." should be in italics. *done or we used \em*
- Journal volumes should be in bold font. *done*
- Inconsistent listing of collaborations. Use "[CLAS Collaboration]" instead of "[CLAS]".

*A: we corrected that.*

- Ref. [37]. Use "B.A. Mecking". Missing page locator (513). *done*
- All references should end with a period. *done*
- Comma after journal volume, then page number, and then year. *done*
- No comma after last author's name at the "et al.". *done*
- Ref. [53]. Use "Phys. Rev. Lett.". *done*
- Put references in the order cited in the text. *Done, except the footnote that appears at the end of the reference list no matter where in the paper it is referenced.*