Valery Kubarovsky <val.kuba@gmail.com>

Re: review of the "Search for Phi--(1862) Pentaquark State"

8 messages

Hovanes Egiyan <hovanes.egiyan@gmail.com> **Wed, Dec 16, 2009 at 3:13 PM**
Reply-To: hovanes.egiyan@gmail.com
To: Angela Biselli <biselli@jlab.org>, Valery Kubarovsky <vpk@jlab.org>, Carlos Salgado <salgado@jlab.org>

Dear members of the review committee,

Thank you very much for your patience with this analysis.
Our group completed the normalization checks mostly done by Lewis Graham
from University of South Carolina. The result show that we do understand eg3
normalization within 10%. Here is a short list of main modifications from the very
first version of the analysis note:

o Normalization studies showed that there is trigger inefficiency in the eg3 data most likely due to the start counter. The start counter in eg3 trigger was in two stages: one in Level 1 in sector-based coincidence with TOF; and second, in the asynchronous input to the trigger supervisor in coincidence with tagger MOR (mostly for runs after Christmas).
Correction functions were developed and applied to the data to get proper normalization for the cross sections.

o A comparison of eg3 cross sections for (gamma d --> Delta++ pi- n) channel to the g11 cross sections for (gamma p --> Delta++ pi-) channel shows a good agreement. Both data sets are in agreement with the SAPHIR data.

o A problem was identified by the committee in the comparison of the acceptances with different event generators. We traced it to the way the acceptance was calculated for the events from (Xi- pi- K+ K+) phase space configuration. This issue has been resolved now, the two event generator models (row 1 and row 4 in Table 6 in the new note) give consistent results.
o The committee pointed out that the timing cut between the CLAS and the tagger was too narrow. We significantly increased the cut window (by a factor of 4) to 3.2ns.

o The timing cuts for selecting the Lambda-candidates has been modified.

o The "c tau" cuts were practically removed from the part of the analysis where the upper cross sections were calculated, because GSIM does not seem to reproduce these distributions in a reliable manner.

o The committee found that the trigger configuration actually used during the data acquisition was different than what was requested. The 3-sector trigger was a requirement of 3 sectors with TOFxST coincidences. The other part with 2 sectors but 3 start counters was dropped from the trigger file. The current analysis takes this into account.

You can find the detailed answers to the comments and the new version of out analysis note at our wiki page at :
http://clasweb.jlab.org/rungroups/eg3/wiki/index.php/Analysis_review_by_Hadron_Spectroscopy_Working_Group

Best regards,

Hovanes.

Angela Biselli <biselli@jlab.org> **Thu, Mar 4, 2010 at 1:59 AM**
To: hovanes.egiyan@gmail.com
Cc: Valery Kubarovsky <vpk@jlab.org>, Carlos Salgado <salgado@jlab.org>

Dear Hovanes,
please find attached the second round of comments for the latest version of the analysis note. The committee found the analysis and the analysis note greatly improved. We believe this work is ready for publication, pending the answers to the comments below. We are looking forward to hear back from you and we will do our best to give you a prompt answer so that you can proceed with the Ad Hoc committee as soon as possible.

Best regards

Angela

On Dec 16, 2009, at 2:13 PM, Hovanes Egiyan wrote:

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> from University of South Carolina. The result show that we do understand eg3
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>
> Best regards,
> Hovanes.

Angela Biselli
Assistant Professor
Physics Department
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203-254-4000 ext 2192

2 attachments

SecondRoundComments.tex
16K

SecondRoundComments.pdf
80K

Hovanes Egiyan <hovanes.egiyan@gmail.com> **Thu, Mar 4, 2010 at 2:46 PM**
Reply-To: hovanes.egiyan@gmail.com
To: Angela Biselli <biselli@jlab.org>
Cc: Valery Kubarovsky <vpk@jlab.org>, Carlos Salgado <salgado@jlab.org>

Dear Committee members,

Thanks for reviewing our two notes,
We will go over the comments and send you the answers as soon as possible.

Regards,
Hovanes.

Angela Biselli wrote:

> [Quoted text hidden]

[Quoted text hidden]

Angela Biselli
Assistant Professor
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Hovanes Egiyan <hovanes.egiyan@gmail.com> **Mon, Aug 16, 2010 at 1:48 PM**
Reply-To: hovanes.egiyan@gmail.com
To: Angela Biselli <biselli@jlab.org>, Valery Kubarovsky <vpk@jlab.org>, Carlos Salgado <salgado@jlab.org>

Dear members of the Committee,

We incorporated your comments and we believe that we have answers to the questions
from the third round of the review. The main changes are:

o Corrections due to decays in the start counter for the main Phi-- analysis and uncertainty associated with it.
o Corrections for 2ns tagger timing cut in the normalization study
o Corrections for multiple hits in the tagger hits in the normalization study

Both the main paper and the normalization study significantly improved after this round.
As the uncertainties increased, so did the upper limit which is now stands at approximately 700pb.
I posted our responses to the comments and new versions of the main analysis note and the supplemental note on normalization at our wiki page:

http://clasweb.jlab.org/rungroups/eg3/wiki/index.php/Analysis_review_by_Hadron_Spectroscopy_Working_Group.#Third_Round

We appreciate your patience and cooperation, and we hope these responses answer the issues raised by the committee.
We are working on the draft of the full paper and we will send it to you when it is reasonably good shape.

Best regards,
Hovanes.

Angela Biselli wrote:

[Quoted text hidden]

On Dec 16, 2009, at 2:13 PM, Hovanes Egiyan wrote:

[Quoted text hidden]

Angela Biselli
Assistant Professor
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Carlos Salgado <salgado@jlab.org> **Fri, Sep 3, 2010 at 11:14 AM**
To: Angela Biselli <biselli@jlab.org>
Cc: Valery Kubarovsky <vpk@jlab.org>

Dear Angela

Where are we on this? In my opinion, they have answered all our comments I am ready to give the go ahead (and, I believe, that it is not our job but the ad-hoc committee, to review the draft paper).
See you Carlos

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Carlos W. Salgado
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Director, NSU Astronomical Observatory
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http://www.jlab.org/~salgado

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Angela Biselli <biselli@jlab.org> **Tue, Sep 7, 2010 at 8:36 AM**
To: Carlos Salgado <salgado@jlab.org>
Cc: Valery Kubarovsky <vpk@jlab.org>

Dear Carlos and Valery
yes we are on this. It is true we are not reviewing the paper, but traditionally the analysis committee takes a look at the paper as well to see which results are presented and how. That's why I was waiting for the paper. Also we are not really slowing down the review process since they have to write the paper anyways to proceed to the Ad Hoc committee

Anyways, we can certainly give them some feedback while we are waiting for the paper. Valery did you read their answers yet? Are you satisfied? I will look at them today and let you know

Best regards

Angela

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Angela Biselli
Associate Professor
Physics Department
Fairfield University

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Valery Kubarovsky <vpk@jlab.org> **Wed, Sep 8, 2010 at 10:50 AM**
To: Angela Biselli <biselli@jlab.org>
Cc: Carlos Salgado <salgado@jlab.org>

Hi Angela and Carlos,
I believe that the group made a great job and we can release the analysis note for the
Ad Hoc committee review.
Regards,
Valery
[Quoted text hidden]

Angela Biselli <biselli@jlab.org> **Fri, Sep 17, 2010 at 3:28 PM**
To: dgi@jlab.org
Cc: Valery Kubarovsky <vpk@jlab.org>, Carlos Salgado <salgado@jlab.org>, Pasyuk Eugene <pasyuk@jlab.org>, Hovanes Egiyan <hovanes.egiyan@gmail.com>

Dear David,
the committee, composed of Valery Kubarovsky, Carlos Salgado and myself (Chair) was charged with reviewing "Upper Limits for the Photoproduction Cross Section for the Φ−−(1862) Pentaquark State in Ξ−π− Decay Channel Using EG3 Data" analysis.
After reviewing the latest version of the analysis note, the supporting note for the normalization studies and the answers to the third round comments, the committee is completely satisfied with Hovanes (and co-authors) response. In our opinion the analysis is well done, well presented and ready to proceed to the Ad Hoc committee.

We would like to thank the authors for their patience in this lengthy review process and congratulate them for the good work.
I also would like to personally thank Valery and Carlos for their excellent work in this review.

Best regards

Angela
[Quoted text hidden]
Angela Biselli
Associate Professor
Physics Department
Fairfield University
[Quoted text hidden]
