08:30 - 10:00

Hadron Spectroscopy Working Group - I

https://bluejeans.com/796421854

Convener: Dr. Marco Battaglieri (INFN-GE)

08:30  **HSWG Business 20’**
Speaker: Dr. Marco Battaglieri (INFN-GE)

08:50  **JPAC update 30’**
Speaker: Dr. Vincent Mathieu (JLab)
Material: Slides

09:20  **An update on omega->pi0e+e- analysis from g12 15’**
Speaker: Susan Schadmand (Forschungszentrum Juelich)

09:35  **Update on gamma p -> p pi0 eta analysis from g12 25’**
Speaker: Dr. Andrea Celentano (INFN-Genova)

10:00 - 10:30  **Coffee break**

10:10 - 12:10

Hadron Spectroscopy Working Group - II

https://bluejeans.com/796421854

Convener: Dr. Marco Battaglieri (INFN-GE)

Location: L102-104

10:30  **Photoproduction of Λ* resonances 20’**
Speaker: Utsav Shrestha (Ohio University)

10:50  **np -> d pi0 from the g12 data 20’**
Speaker: Ken Hicks (Ohio University)

11:10  **Update on Lambda-Nucleon Scattering with g12 20’**
Speaker: Mr. Joey Rowley (Ohio University)

11:30  **Status of the HSWG data analysis 20’**

11:50  **Discussion 10’**

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**HSWG**

**CLAS Collaboration Meeting**

**JLab, Mar 7 2019**

**+ HS/Deep/Nuclear**

**CLAS12 analyses joint session**
Agenda

- CLAS6 data analysis
- Status of ongoing analysis (update from previous collaboration meeting)
- Dedicated (joint) session for CLAS12
  - Data processing readiness review
  - Reorganisation of analysis review process

Talks

- Over all CLAS contributions, HSWG-related are 29% in 2018
- HSWG representatives in the CSC
  - A.d’Angelo (currently CSC chair)
  - L.Guo
- JSA-TFC $18k granted for 2019
CLAS12-related Activities

- Bi-weekly HSWG meeting focused on Low-Q2 specific needs:
  - FT Calibration (in coordination with the CALCOM and FirstExperiment)
  - MesonExTrigger studies
  - pld task force
  - review the status of current analysis (similar to Fall ‘18 DNP preparation)

- Meeting on Tuesday at 11:00 (JLab-time) every other week

- All groups are encouraged to look at the data (low/high level) to check calibration, possible issues, …

- List of ongoing analysis on HSWG wiki page

For discussion

- Analysis framework: discussion in the plenary session
- Analysis tools validation:
  - needs to be discussed
- Analysis review optimization
  - guide lines

For the next meeting

- HSWG nominating committee (vote in July, term starts in September)
<table>
<thead>
<tr>
<th>Reaction</th>
<th>CLAS running period</th>
<th>Principal Investigator(s)</th>
<th>Graduate Student</th>
<th>Adviser(s)</th>
<th>Contact person(s)</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\gamma^* p \rightarrow \pi^0 p$ and eta $p$</td>
<td>RG-A</td>
<td>Andrea Bianconi, Luca Venturelli</td>
<td></td>
<td></td>
<td><a href="mailto:andrea.bianconi@unibs.it">mailto:andrea.bianconi@unibs.it</a></td>
<td>Underway</td>
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<tr>
<td>$Q^2$-dependent cross sections for $\gamma^* p \rightarrow \pi^+ \pi^- p$ at $Q^2 &gt; 2$ GeV2</td>
<td>RG-A</td>
<td>Krishna Neupane</td>
<td>Ralf Gothe</td>
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<td>Underway</td>
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<tr>
<td>$\gamma^* p \rightarrow \pi^+ \pi^- p$</td>
<td>RG-A</td>
<td>Adam Thornton</td>
<td>Derek Glazier</td>
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<td>Underway</td>
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<tr>
<td>3pi</td>
<td>RG-A</td>
<td>Derek Glazier</td>
<td>Derek Glazier</td>
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<td>No Signal Yet</td>
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<td>rho beam asymmetry</td>
<td>RG-A</td>
<td>Michael Dugger</td>
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<tr>
<td>Survey of photoproduced cascade states</td>
<td>RG-A</td>
<td>Michael Dugger</td>
<td>Michael Dugger</td>
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<td>survey of Cascade and Omega baryons</td>
<td>RG-A</td>
<td>Nicholas Zachariou</td>
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<td>Omega- cross section</td>
<td>RG-A</td>
<td>Will Phelps</td>
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<td>Inclusive and elastic cross section studies</td>
<td>RG-A</td>
<td>Nikolay Markov</td>
<td>Nikolay Markov</td>
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<td>Single pion electroproduction in the resonance region</td>
<td>RG-A</td>
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<td>Single pion exclusive structure functions at $Q^2 &gt; 5$ GeV2</td>
<td>RG-A</td>
<td>Evgeny Isupov</td>
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<td>$\gamma^* p \rightarrow \pi^+ \pi^- p$ cross sections at $Q^2 &gt; 5$ GeV2</td>
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<td>Exclusive Two K-short electroproduction cross sections</td>
<td>RG-A</td>
<td>Ken Hicks</td>
<td>Ken Hicks</td>
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<td>Just started</td>
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<td>N* structure: KY cross section, pol. transfer at $Q^2 &gt; 1$ GeV2</td>
<td>RG-A</td>
<td>Daniel S. Carman</td>
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<td>Extraction of the nucleon resonance electroexcitation amplitude from $\gamma^* p \rightarrow \pi^+ \pi^- p$ electroproduction off protons with the CLAS12.</td>
<td>RG-A</td>
<td>Viktor Mokeev</td>
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<td>Evaluation of the resonant contribution into inclusive structure functions.</td>
<td>RG-A</td>
<td>Astrid Hiller Blin</td>
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<td>eta.pi</td>
<td>RG-A</td>
<td>Carlos Salgado</td>
<td>Carlos Salgado</td>
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<td>Did not start Yet (in January)</td>
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<td>J/psi photoproduction near threshold</td>
<td>RG-A</td>
<td>Stepan Stepanya</td>
<td>Joseph Newton</td>
<td>Nathan Baltzell, Rafayel Paremuzyan, Valery Kubarovsky</td>
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<td>$n^*$ and $\omega$ decays</td>
<td>RG-A</td>
<td>Susan Schadmant</td>
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- CLAS12 data analysis
- List on HSWG wiki ([https://www.jlab.org/Hall-B/secure/hadron/wiki/index.php/CLAS12_Analysis_projects](https://www.jlab.org/Hall-B/secure/hadron/wiki/index.php/CLAS12_Analysis_projects))
- Keep it updated
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WG Reviews status

Released

Vector-Meson Photoproduction decaying to Multitrack-Final States using CLAS-g12 Data
Pl: Z.Akbar
RC: John Price (Chair), Susan Schadmand, Eugene Pasyuk
Status: started on Jan 1, progressing, the committee received the author’s response, NEED TO GIVE FEEDBACK ASAP

New since last meeting

Analysis of the polarization observables $H$ and $P$ from the reaction $\gamma p \rightarrow p\pi^+ n$
Pl: R.Lee
RC:
Status: about to start
WG Reviews status

In progress

Measurement of the G Double-Polarisation Observable in Positive Pion Photoproduction
PI: L.Zana
RC: S.Strauch (Chair), P.Cole, D.Sokhan
Status: 1 round of comments sent on August, waiting for the response; still waiting now ….

Polarization Observables T and F in the $\vec{p}(\gamma,\pi^0)p$ Reaction
PI: H.Jiang
RC: Barry Ritchie (Chair), Volker Crede, Bryan McKinnon
Status: the group is working on major issue, after a thorough review, it is almost done
**WG Reviews status**

**In progress**

**Exclusive pi- Electroproduction off the Neutron in Deuterium in the Resonance Region**

Pl: Y. Tian  
RC: Nikolay Markov (Chair), Mikhail Bashkanov, Eugene Isupov  
Status: 1st round in August, waiting for response from Pl, response received, II round uploaded on Feb 8

**Dalitz Plot Analysis of eta' to eta pi pi – from CLAS g12 Data Set**

Pl: S. Ghosh  
RC: V. Crede (chair), A. Rizzo, E. Pasyuk  
Status: Started in July’17; first round of comments on Sept 17: no response from the Pl since then. Scarce communication with the review committee. Is the analysis dead????

Ankhi is taking over but a lot of work needs to be done

**Exclusive Photo-Production Measurement of K+Sigma*- off Quasi-Free Neutrons in Deuterium**

Pl: H. Lu (SCU) et al.  
RC: N. Zachariou, M. Dugger, D. MacGregor  
Started in 2012 (!)  
Status: the Pl is working on it: may be a month?

**Dalitz Plot Analysis of eta' to eta pi pi – from CLAS g12 Data Set**

Pl: S. Ghosh  
RC: V. Crede (chair), A. Rizzo, E. Pasyuk  
Status: Started in July’17; first round of comments on Sept 17: no response from the Pl since then. Scarce communication with the review committee. Is the analysis dead????

Ankhi is taking over but a lot of work needs to be done
WG Reviews status

Photoproduction of the $3\pi$ mesons in the reaction $\gamma p \rightarrow \pi^+\pi^+\pi^-$ with CLAS detector at 6 GeV/c2
PI: P. Eugenio
RC: D. Glazier (chair), A. Filippi, M. Dugger
Status: 2nd round, response received, almost done

Exclusive Photo-Production Measurement of K+Sigma*, off Quasi-Free Neutrons in Deuterium
PI: H. Lu (SCU) et al.
RC: N. Zachariou, M. Dugger, D. MacGregor
Started in 2012 (!)
Status: ???????????

Dismissed
KLambda and KSigma from FROST
PI: N. Walforf et al.
RC: S. Strauch, M. Holtrop, P. Mattione,

Pentaquark search in g10 by using the MMSA method
PI: Kenneth Hicks et al.
RC: Stepan Stepanyan (Chair), Lei Guo, Bryan McKinnon

Radiative decay of eta' to pi+ pi- gamma from g11 data set
PI: G. Mbianda Njencheu
RC: R. Schumacher, S. Schadmand, A. Celentano

Spin observables in eta meson photoproduction on the proton from FROST data
PI: R. Tucker (ArizonaU) et al.
RC: K. Livingston, J. Price, Xiangdong Wei

Actions
※ Remove these analyses from the list of active analyses
※ Share this information to the whole HSWG to see if any resources could be allocated to continue (assuming full collaboration from the former PI!)