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)

### **HSWG**

**CLAS Collaboration Meeting** |Lab, Mar 7 2019

Coffee break 10:10 - 12:10 Hadron Spectroscopy Working Group - II https://bluejeans.com/796421854 Convener: Dr. Marco Battaglieri (INFN-GE) Location: L102-104 Photoproduction of  $\Lambda^*$  resonances 20' 10:30 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'

+ HS/Deep/Nuclear CLASI2 analyses joint session



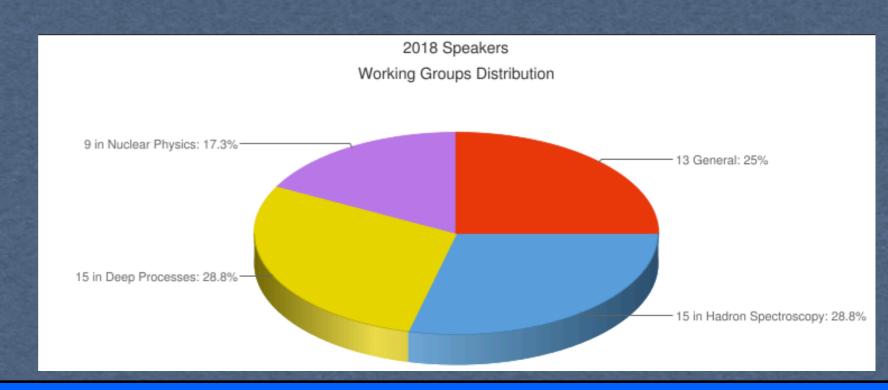
10:00 - 10:30

### 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



#### **CLASI2-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)

Reaction	CLAS running period	Principal Investigator(s)	Graduate Student	Adviser(s)	Contact person(s)	Status
$\gamma^* p  o \pi^0 p$ and eta p	RG-A	Andrea Bianconi, Luca Venturelli			mailto:andrea.bianconi@unibs.it 🖃	
Q <sup>2</sup> -dependent cross sections for $\gamma^* p \to \pi^+ \pi^- p$ at Q <sup>2</sup> > 2 GeV2	RG-A	Krishna Neupane		Ralf Gothe		Underway
$\gamma^* p \to \pi^+ \pi^- p$	RG-A	Adam Thornton		Derek Glazier		Underway
3pi	RG-A	Derek Glazier		Derek Glazier		No Signal Yet
rho beam asymmetry	RG-A	Michael Dugger		Michael Dugger		Underway
Survey of photoproduced cascade states	RG-A	Michael Dugger		Michael Dugger		No Signal Yet
survey of Cascade and Omega baryons	RG-A	Nicholas Zachariou		Nicholas Zachariou		Underway
Omega- cross section	RG-A	Will Phelps				Underway
Inclusive and elastic cross section studies	RG-A	Nikolay Markov			Nikolay Markov	Under way
Single pion electroproduction in the resonance region	RG-A	Nikolay Markov			Nikolay Markov	Under way
Single pion exclusive structure functions at Q2 > 5 GeV2	RG-A	Evgeny Isupov			Evgeny Isupov	Under way
$\gamma^* p  o \pi^+ \pi^- p$ cross sections at Q2 > 5 GeV2	RG-A	Evgeny Golovach			Evgeny Golovach	Under way
Exclusive Two K-short electroproduction cross sections	RG-A	Ken Hicks			Ken Hicks	Just started
N* structure: KY cross section, pol. transfer at Q2 > 1 GeV2	RG-A	Daniel S. Carman			Daniel S. Carman	Under way
Extraction of the nucleon resonance electroexcitation amplitude from $\gamma^* p \to \pi^+ \pi^- p$ electroproduciton off protons with the CLAS12.	RG-A	Viktor Mokeev			Viktor Mokeev	Under way
Evaluation of the resonant contribution into inclusive structure functions.	RG-A	Astrid Hiller Blin			Astrid Hiller Blin	Under way
eta.pi	RG-A	Carlos Salgado		Carlos Salgado		Did not start Yet (in January)
J/psi photoproduciton near threshold	RG-A	Stepan Stepanya	Joseph Newton	Nathan Baltzell, Rafayel Paremuzyan, Valery Kubarovsky		Analysis started
$\eta'$ and $\omega$ decays					Susan Schadmand	Did not start yet

- \* CLASI2 data analysis
- \* List on HSWG wiki (https://www.jlab.org/Hall-B/secure/hadron/wiki/index.php/CLAS12\_Analysis\_projects)
- \* Keep it updated

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	Location: L102-104				
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### Released

Vector-Meson Photoproduction decaying to Multitrack-Final States using CLAS-g12 Data

PI: Z.Akbar

RC: John Price (Chair), Susan Schadmand, Eugene Pasyuk

Status: started on Jan I, 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 -> pi+ n

PI: R.Lee

RC:

Status: about to start



# 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: I 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

# In progress

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

PI:Y.Tian

RC: Nikolay Markov (Chair), Mikhail Bashkanov, Eugene Isupov

Status: 1st round in August, waiting for response from PI, response received, II round uploaded on Feb 8

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

PI: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 PI since then.

Scarce communication with the review committee. Is the analysis dead ?????



PI: H.Lu (SCU) et al.

RC: N.Zachariou, M.Dugger, D.MacGregor

Started in 2012 (!)

Status: the PI is working on it: may be a month?

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

PI: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 PI since then.

Scarce communication with the review committee. Is the analysis dead ?????

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





Photoproduction of the  $3\pi$  mesons in the reaction  $\gamma p \to \pi + \pi + \pi - n$  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 gll 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 ay resources could be allocated to continue (assuming full collaboration from the former PI!)