

# HSWG

## CLAS Collaboration Meeting

### JLab, Februrry 25 2015

#### Early Morning

- 08:45- 09:10 Opening remarks [↗](#) - *Marco Battaglieri*
- 09:10 - 09:30 The tools for evaluation of the gvNN\* electrocouplings from the CLAS data [↗](#) - *Evgeni Isupov - remote*
- 09:30 - 09:50 Light Meson Decay working group activities [↗](#) - *S.Schadmand*
- 09:50-10:10 An update on the Electromagnetic Transition Form Factor of the eta' meson with g12 and CLAS12 [↗](#) - *Michael Kunkel - remote*
- 10:10 - 10:30 An update on Radiative Decay of eta' (from g11 data set). [↗](#) - *Georgie Mbianda Njencheu*

Coffee Break

#### Late Morning

- 11:00 - 11:20 JPAC activities [↗](#) - *Vladiylsav Pauk*
- 11:20 - 11:40 The HASPECT analysis framework [↗](#) - *Derek Glazier*
- 11:40 - 12:00 An update on omega cross section extraction [↗](#) - *Zulkaida Akbar*

#### Early afternoon

- 14:10 - 14:35 Coherent proton anti-proton pair production off deuterium from eg3 data [↗](#) - *Stepan Stepanyan*
- 14:35 - 14:55 Lambda-proton elastic scattering. [↗](#) - *John Price*

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#### Late afternoon

- 15:30 - 16:00 Analysis review status
  - K0A Photoproduction on the Neutron [↗](#) - *Lorenzo Zana*
  - Analysis of gamma p to K0K0 from the g12 Data Set [↗](#) (PI: K.Hicks/S.Chandavar) - *Carlos Salgado*
  - Pentaquark search in g10 by using the MMSA method (PI: K.Hicks [↗](#)) - *Stepan Stepanyan*
  - 2pi from e1-6 (PI: E.Golovach) [↗](#) - *R.Gothe*
  - Exclusive Photo-Production Measurement of K+Sigma\* - off Quasi-Free Neutrons in Deuterium (PI: H.Lu) [↗](#) - *Nick Zachariou*
  - KLambda and KSigma from FROST (PI: N.Waldorf [↗](#)) - *Steffen Strauch*
  - Polarized structure function sigmaLT from the single pi0 electroproduction on the proton in the resonance region (PI:N.Markov) [↗](#) - *Volker Crede*
  - Spin observables in omega photoproduction (PI: B.Vernarsky) [↗](#) - *Franz Klein*
  - Analysis of K+K photo-production from the g11 Data Set (PI: S.Lombardo) [↗](#) - *Paul Eugenio*
  - Polarization Observables in g(pol)p(pol)->ppi+pi-Using the g9a (FROST) Target and CLAS (PI: V. Crede) [↗](#) - *Ken Livingston*
  - gamma p -> eta p, gamma p -> eta' p and gamma p -> omega p beam asymmetries (PI: P.Collins - M.Dugger) [↗](#) - *Lei Guo*
- 16:00 - 17:00 g12 Run Group review
- 16:00 - 16:10 G12 Anayses Status [↗](#) - *Michael Kunkel*
- 16:10 - 16:20 Analysis Review status: g12 Run Group review [↗](#) - *Eugene Pasyuk*
- 16:20 - 17:00 Discussion

## Agenda

- \* Discussion about on-going / new-analysis
- \* status of g12 analysis review

## Activities

- \* Regular report at HSWG on JPAC activity to strengthen exp/the connection
- \* Selected talks on more advanced analysis on plenary session at the CLAS Collaboration
  - D.Ireland Photoproduction of Lambda and Sigma0 with linearly polarized photons
  - P.Roy Towards a Complete Experiment in Vector-Meson Photoproduction from FROST

## Talks

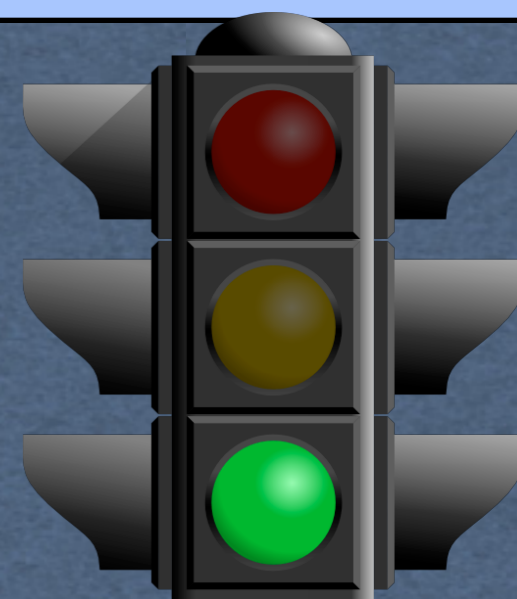
- \* Over all CLAS contribution, HSWG-related are 41% and 60% for proceedings
- \* Friday is the last day for BARYON2016 conference submission
- \* Contributions to conferences as HSWG and when talk is secured, assign speaker
- \* REMINDER: Communicate talks and proceedings to the CSC
- \* **JSA-TFC funds \$20k allocated for 2016**

## Homework for the next Coll Meeting

- \* Analysis framework for the first (and second) experiment(s)
- \* Re-organization of the the HSWG in CLAS12 era:
  - development of a common analysis framework (high level analysis?)
  - role in raw data calibration and correction
  - analysis review : tutoring? run-grip analysis?



# WG Reviews status



E asymmetry for  $g n \rightarrow \pi^- p$  from  $g l 4$  (HDice) data

PI: F.Klein

RC: B.Briscoe, P.Cole, M.Dugger

Not started yet

New

$K^0 \Lambda$  Photoproduction on the Neutron within the Resonance Region since last meeting

PI: Nick Compton

RC: L.Zana, E.Isupov, S.Schadmand

Started Jan 2016

Status: 1 round

$2\pi$  electroproduction at large  $Q^2$  from E1-6 run

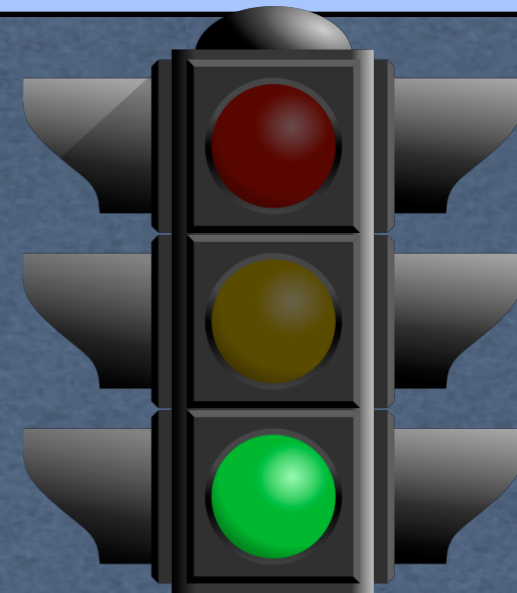
PI: E.Isupov et al.

RC: B.Briscoe, M.Guidal, M.Ripani



**DONE!**

# WG Reviews status



## Gamma p to K0K0 from the gI2 Data Set

PI: Kenneth Hicks and Shloka Chandavar

RC: Carlos Salgado (Chair), Derek Glazier , Lorenzo Zana

I round of comments completed

## Pentaquark search in gI0 by using the MMSA method

PI: Kenneth Hicks et al.

RC: Stepan Stepanyan (Chair), Lei Guo , Bryan McKinnon

II round of comments, waiting PI reply

## 2pi photoproduction from gI I

PI: Evgheny Golovach et al.

Ralf Gothe (Chair), Lei Guo , Alessandro RizzoStepan

II round of comments, waiting for PI reply (close to the end)

In progress



## KLambda and KSigma from FROST

PI: N.Walforf et al.

RC: S.Strauch, M.Holtrop, P.Mattione,

1 round of comments in May 2015, waiting for a revised version of the note, contacts with PI in Oct 2015

## 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

Status: resumed with reshuffled committee, still waiting ...

## Spin observables in omega production

PI: Brian Vernarsky

RC: F.Klein, A.Filippi, S.Strauch

Started Sept 2014

Status: resumed connection with CMU, Committee needs to set up a final meeting

## Polarization Observables in $g(\text{pol})p(\text{pol}) \rightarrow ppi + \pi$ -Using the g9a (FROST) Target and CLAS

PI: V.Crede (FSU) et al.

RC: K.Livingston, V. Ziegler, E. Golovach

Timeline: Sep 12 2013 started, Oct 14 1st round

Status: new note received, in touch with the PI

## $\gamma + p \rightarrow p K^+ K^-$ reaction

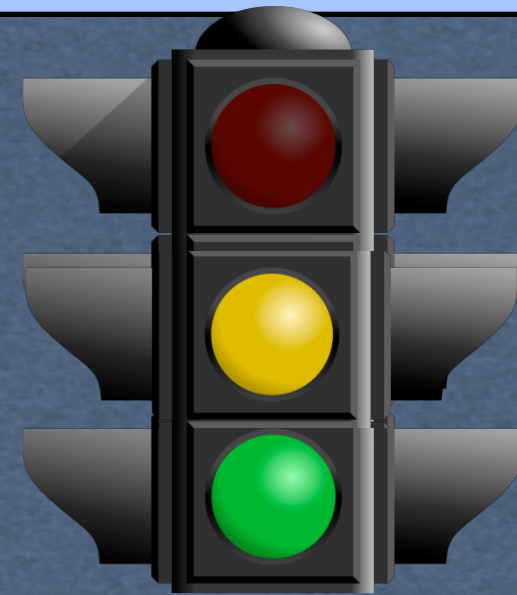
PI: S.Lombardo (Cornell)

RC: P.Eugenio, D. Schott, D. Carman

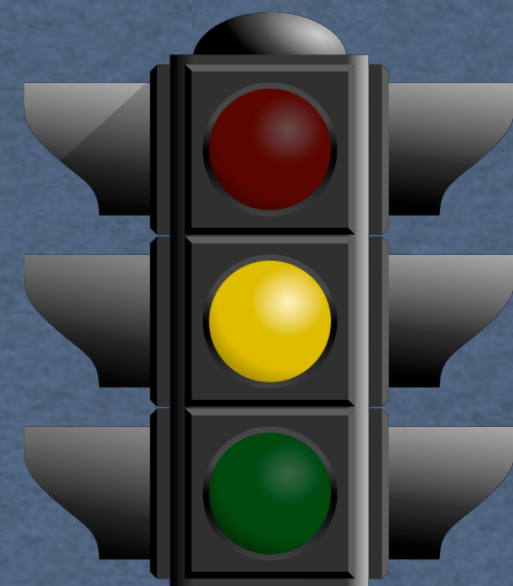
Timeline: started Jan 17 2014

Status: almost done ????

# WG Reviews status



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Polarized structure function  $\sigma_{LT}$  from the single  $\pi^0$  electroproduction on the proton in the resonance region

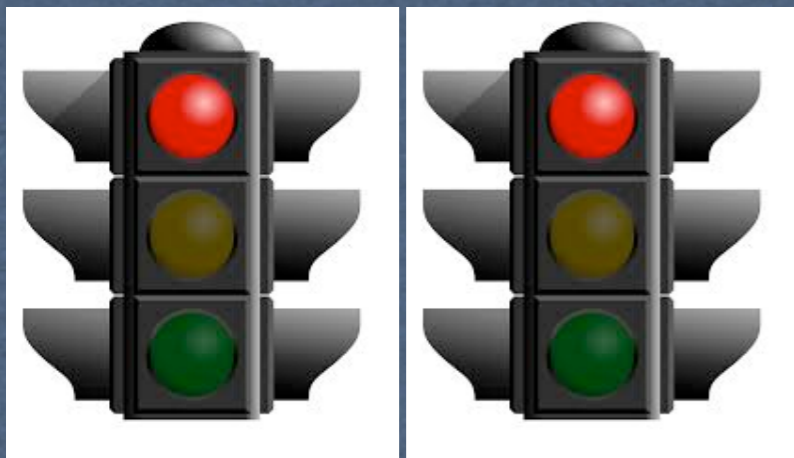
PI: Nick Markov

RC: V. Crede, Ralf Goethe, Yelena Prok

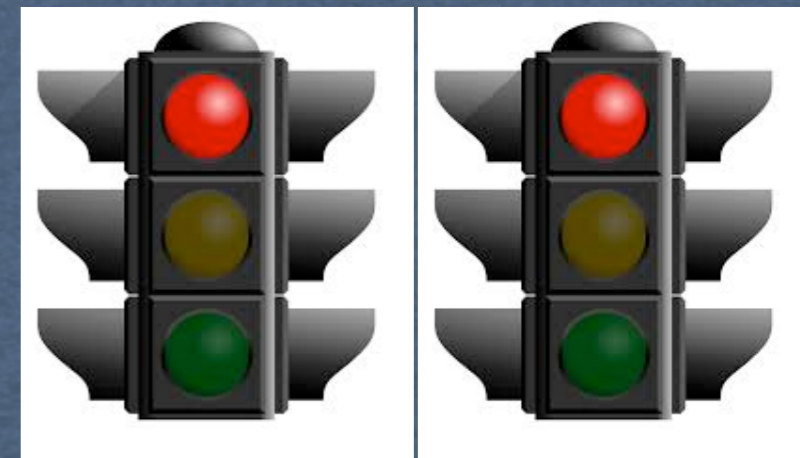
Started Sept 2014

Status: analysis almost done but poor quality note





## WG Reviews status



Data analysis technique for obtaining  $\gamma p \rightarrow \eta p$ ,  $\gamma p \rightarrow \eta' p$  and  $\gamma p \rightarrow \omega p$  beam asymmetries from the g8b running period

PI: Mike Dugger (Patrick Collins)

RC: L.Guo, D.Sober, E.Golovach

Timeline: Jan 2013 started, Feb 1st round

Status: ??? no feedback form the PI



**Action  
required!**

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