

Hadron Spectroscopy 1

Remote connection: <https://bluejeans.com/468208461>

Convener: Marco Battaglieri (INFN-GE)

Location: CEBAF Center (L102)

- 08:30 **Hadron Spectroscopy Working Group Business 20'**
Speaker: Marco Battaglieri (INFN-GE)
- 08:50 **JPAC report 25'**
Speaker: Vincent Mathieu (IU)
- 09:15 **Finite energy sum rules in pseudoscalar meson photoproduction 25'**
Speaker: Jannes Nys (Ghent University)
- 09:40 **Preparing for CLAS12 data analysis 25'**
Speaker: Derek Glazier (University of Glasgow)
- 10:05 **PyPWA 25'**
Speaker: Carlos Salgado (NSU/JLab)
- 10:30 **Coffee Break 30'**
- 11:00 **Full CLAS12 simulation and reconstruction: $e p \rightarrow e' p \pi^0$ (remote) 25'**
Speaker: Stefan Diehl (University of Giessen)
- 11:25 **Analysis of $\eta \rightarrow \pi + \pi - X$, $X = \pi^0/g$ within the CLAS g12 data set 25'**
Speaker: Daniel Lersch (Forschungszentrum Juelich)
- 11:50 **Determination of C_x , C_z , and P for gamma $d \rightarrow K^0 \Lambda(p)$ from g13 Data 25'**
Speaker: Colin Gleason (South Carolina University)
- 12:15 **Polarization observables for the Lambda hyperon for photon energies up to 5.45 GeV 25'**
Speaker: Shankar Adhikari (Florida International University)
- 12:40 **Omega-meson Photoproduction off of Deuterium using CLAS g10 data 25'**
Speaker: Taya Chetry (Ohio University)
- 13:05 **Lunch 1h25'**
- 14:30 **Status of HSWG analysis reviews 30'**
- 16:00 **Coffee break 30'**

HSWG

CLAS Collaboration Meeting
JLab, March 30 2017

Agenda

- * Status of ongoing analysis
- * Status of analysis review
- * ACE and HSWG in CLAS12 era: building a sweet and regulated framework for spectroscopy (K.Hicks)

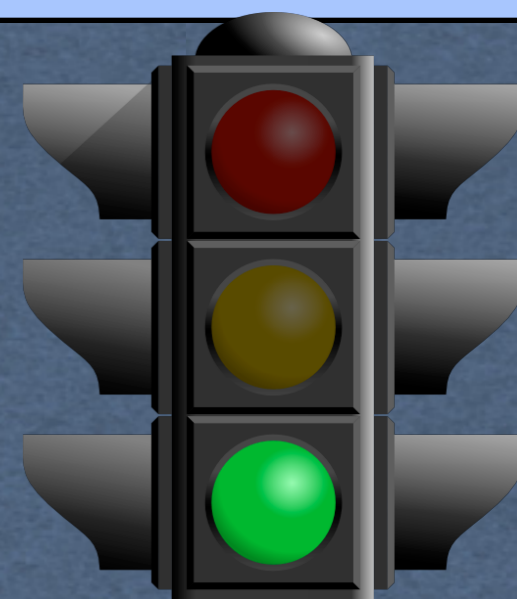
Activities

- * Regular report at HSWG on JPAC activity to strengthen exp/the connection
- * Analysis review: check technical analysis and if the physics (technically) correctly extracted
- * Analysis ready for a plenary presentation?

Talks

- * Over all CLAS contributions, HSWG-related are 30-40%
- * Strong interaction with the CSC
- * List of possible topics/speakers on the latest CLAS results
- * REMINDER: Communicate talks and proceedings to the CSC
- * JSA-TFC funds \$20k allocated for 2016
- * JSA-TFC funds available for N* conference (August 20 - 23, 2017 at the University of South Carolina, Columbia, SC)

WG Reviews status



E asymmetry for $g n \rightarrow \pi^- p$ from g14 (HDice) data

PI: F.Klein

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

Gamma p to $K^0 K^0$ from the g12 Data Set

PI: Kenneth Hicks and Shloka Chandavar

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



DONE!

Analysis report on the $ep \rightarrow e'p \pi^+ \pi^-$ reaction in the CLAS detector with a 2.039 GeV beam

PI: Gleb Fedotov

RC: Nikolay Markov (Chair), Evgeny Golovach, Daniel Carman

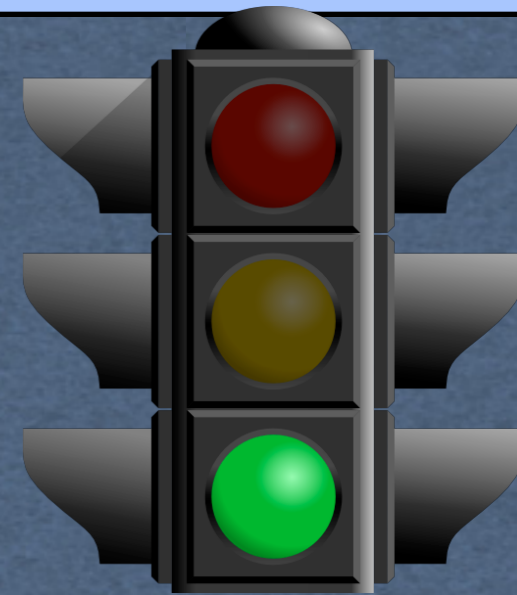
Less than 6 months!

Measurement of the $g d \rightarrow p \pi^- (p)$ Quasi-free xsec

PI: Paul Mattione

RC: Eugene Pasyuk (Chair), Nicholas Compton, Nicholas Zachariou

WG Reviews status



Coherent omega-meson photoproduction off the deuteron

PI: T.Chetry

RC: B.McKinnon, P.Cole, N.Zachariou

Status: 1st round

Radiative decay of η' to $\pi^+ \pi^- \gamma$ from $g \Pi \Pi$ data set

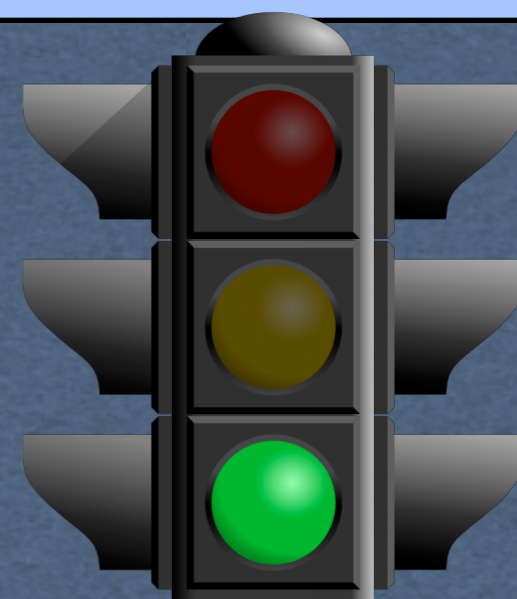
PI: G. Mbianda Njencheu

RC: R. Schumacher, S.Schadmand, A.Celentano

Status: 1st round

New
since last meeting

WG Reviews status



Measurement of Cross-Sections of exclusive π^0 Photo-production on Hydrogen from 1.1 GeV - 5.45 GeV using e^+e^- + γ

PI: Michael Kunkel

RC: Carlos Salgado (Chair), Lei Guo, Yordanka Ilieva

Status: 2nd round, healthy

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: 1st round done

Cascade polarization in photoproduction

PI: J. Bono et al.

RC: A. D'Angelo (Chair), M. Kunkel, E. Pasyuk

Status: 2nd round, healthy

Polarized structure function σ_{LT} from the single π^0 electroproduction on the proton in the resonance region

PI: Nick Markov

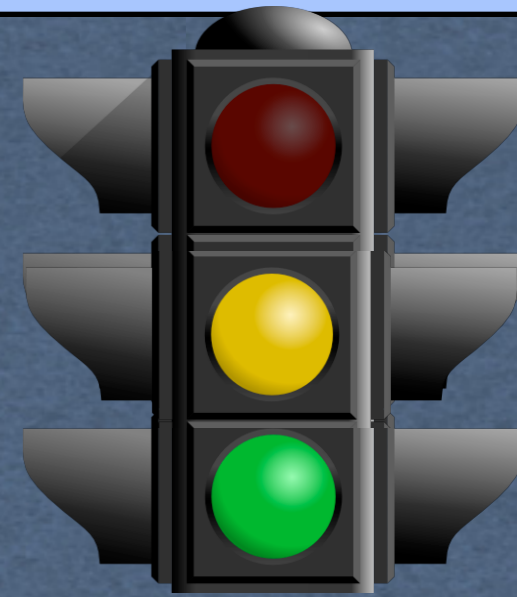
RC: V. Crede, Ralf Goethe, Yelena Prok

Started Sept 2014

Status: is moving forward

In progress

WG Reviews status



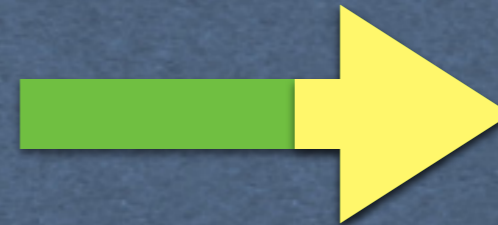
Measurement of Sigma in pi- photoproduction on the neutron from the gI3b dataseta

PI: D.Sokhan (GlasgowU) et al.

RC: Eugene Pasyuk (Chair), Nicholas Zachariou , Paul Mattione

Timeline: jun 2016

Status: lost contact with the author after 1st round

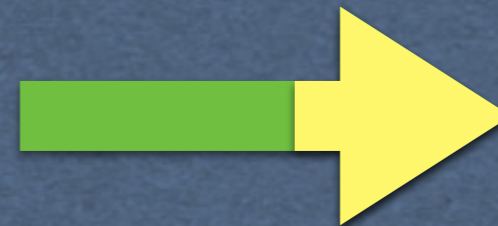


Pentaquark search in gI0 by using the MMSA method

PI: Kenneth Hicks et al.

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

Status: stopped communication from 6 months



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

Status: stalled for a long while, now it seems to be resurrected



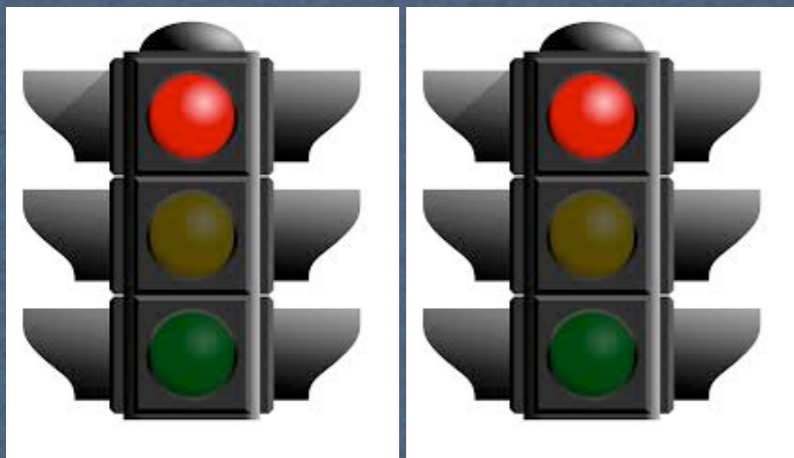
Spin observables in eta meson photoproduction on the proton from FROST data

PI: R.Tucker (ArizonaU) et al.

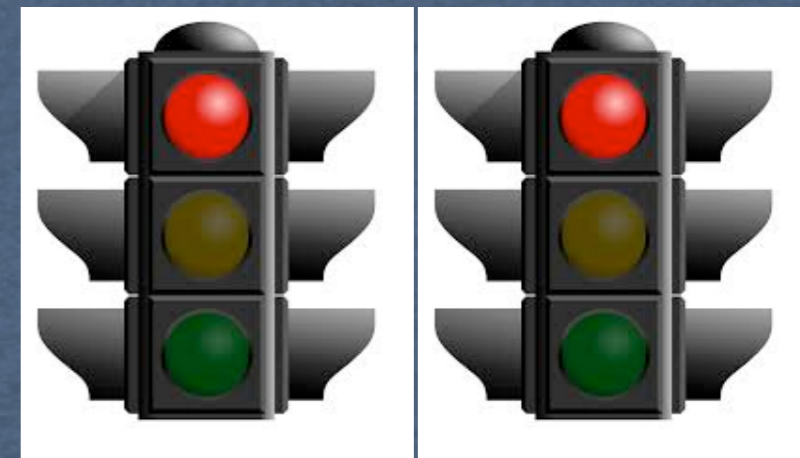
RC: K.Livingston, J.Price, Xiangdong Wei

Timeline: jun 2016

Status: on-hold



WG Reviews status



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 ...



Proposal: set up a restricted committee + someone from the SC/run-group to go through the analysis and see if the latest issues have an easy fix