Hadron Spectroscopy 1

Remote connection: https://bluejeans.com/827115701

Convener: Marco Battaglieri (INFN-GE)
Location: CEBAF Center (Auditorium)

08:45 **ACE summary 10’**
Speaker: Kuhn Sebastian (Old Dominion University)

08:55 **Hadron Spectroscopy Working Group Business 25’**
Speaker: Marco Battaglieri (INFN-GE)

09:20 **The cross section measurement of the 3\pi final states from CLAS-g12 20’**
Speaker: Zulkaida Akbar (FSU)

09:40 **Photoproduction of 3\pi with CLAS 20’**
Speaker: Paul Eugenio (Florida State University)

10:00 **Status update on the analysis of eta->pi+pi-X, X=pi0,g with CLAS 20’**
Speaker: Daniel Lersch (Juelich Research Center)

10:20 **Discussion 10’**

10:30 **Coffee Break 30’**

11:00 **JPAC report 20’**
Speaker: Cesar Fernandez-Ramirez (UNAM)

11:20 **Light meson decay 20’**
Speaker: Susan Schadmand (Forschungszentrum Juelich)

11:40 **CLAS12 MesonEx trigger studies 20’**
Speaker: Stefan Diehl (Giessen University)

12:00 **Near threshold J/psi photoproduction and study of LHCb pentaquarks with CLAS12 20’**
Speaker: Valery Kubarovsky (Jefferson Lab)

12:20 **Analysis reviews status 40’**
Agenda

✴ ACE and HSWG in CLAS12 era: building a sweet and regulated framework for spectroscopy
✴ HSWG presentation of mature analysis: mandatory when ready for review
✴ LHCb pentaq proposal HSWG reviewed and submitted to PAC45
✴ Status of ongoing analysis

Activities

✴ Early results report (B.McKewon)
✴ Are we ready for physics? KPP data analysis showed that we can make it
✴ 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 (e.g. Paul’s $\gamma n \rightarrow p\pi^-$ Differential Cross Section Measurements with CLAS)

Talks

✴ Over all CLAS contributions, HSWG-related are 40%
✴ Regular interactions 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 2017
WG Reviews status

Polarized structure function sigmaLT from the single pi0 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

Measurement of Cross-Sections of exclusive $\pi^0$ Photo-production on Hydrogen from 1.1 GeV - 5.45 GeV using e +e-gamma
PI: Michael Kunkel
RC: Carlos Salgado (Chair), Lei Guo, Yordanka Ilieva
Status: 2nd round, healthy

Cascade polarization in photoproduction
PI: J.Bono et al.
RC: A. D’Angelo (Chair), M. Kunkel, E Pasyuk
Status: 2nd round, healthy

Coherent omega-meson photoproduction off the deuteron
PI: T.Chetry
RC: B.McKinnon, P.Cole, N.Zachariou
Status: 1st round

DONE!

Less than 6 months!
WG Reviews status

Photoproduction of the $3\pi$ mesons in the reaction $\gamma p \rightarrow \pi+\pi+\pi$ $n$ with CLAS detector at 6 GeV/c$^2$
Pl: P. Eugenio
RC: D. Glazier (chair), A. Filippi, M. Dugger
Status: 1st round, waiting for response

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
WG Reviews status

Radiative decay of eta' to pi+ pi- gamma from g11 data set
Pl: G. Mbianda Njencheu
RC: R. Schumacher, S. Schadmand, A. Celentano
Status: 1st round, still waiting for response (was March?)

Polarization Observables T and F in the $\vec{p}(\gamma, \pi^0)p$ Reaction
Pl: H. Jiang
RC: Barry Ritchie (Chair), Volker Crede, Bryan McKinnon
Status: 1st round, still waiting for response (was March?)
WG Reviews status

Measurement of Sigma in pi- photoproduction on the neutron from the g13b dataset
PI: D.Sokhan (GlasgowU) et al.
RC: Eugene Pasyuk (Chair), Nicholas Zachariou, Paul Mattione
Started Jul 2016
Status: lost contact with the author after 1st round, RESUMED YESTERDAY!

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
Started July 2016
Status: on-hold, still on-hold but authors are alive

Pentaquark search in g10 by using the MMSA method
PI: Kenneth Hicks et al.
RC: Stepan Stepanyan (Chair), Lei Guo, Bryan McKinnon
Started Aug 2015
Status: stopped communication from 6 months, NO progress

KLambda and KSigma from FROST
PI: N.Walforf et al.
RC: S.Strauch, M.Holtrop, PMattione,
Started May 2015
Status: stalled for a long while, now it seems to be resurrected, unfortunately NO
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: resumed with reshuffled committee, still waiting …

Asked to SC/run-group to go trough the analysis and see if the latest issues have an easy fix
H.Lu will work in the next few months