



# e-HUGS 2021

## Wednesday, June 16, 2021

### Student seminars: Poster session (1:30 PM - 4:00 PM)

| time    | [id] title   | presenter                 |
|---------|--|---------------------------|
| 1:30 PM | [90] (01) Short Range Quark-Quark Interactions and Nucleon StructureFunction at High Bjorken x   | MAEROVITZ, Joseph         |
| 1:35 PM | [91] (02) Introduction to Light-Front Dynamics   | SAHA, Sudeep              |
| 1:40 PM | [92] (03) CREX Transverse Asymmetry Measurements   | RADLOFF, Robert           |
| 1:45 PM | [93] (04) Quirks of QCD: Twist-2 Operators on the Lattice  | CLARINGBOLD, Tangereen    |
| 1:50 PM | [94] (05) Many proton knock-out from nuclear target using real   | WILLIAMS, Rhidian         |
| 1:55 PM | [95] (06) Shower and Pre-Shower calibration in JLab Hall A   | SRIDHAR, Nandhu           |
| 2:00 PM | [96] (07) Pion Nucleon Scattering in BChPT combined with $1/N_c$ Expansion   | JAYAKODIGE, Dulitha       |
| 2:05 PM | [97] (08) Measuring Neutron Polarization   | BOOTH, William            |
| 2:15 PM | [99] (10) Proton 3D tomography   | MAXIA, Luca               |
| 2:20 PM | [100] (11) Short Range Correlations with CLAS12  | DENNISTON, Andrew         |
| 2:25 PM | [101] (12) Factorization of Lepton Radiation in SIDIS  | CAMMAROTA, Justin         |
| 2:30 PM | [102] (13) Spin Density Matrix Elements for Polarised $p(770)$ Photoproduction at GlueX  | FITCHES, James            |
| 2:35 PM | [103] (14) Heavy quark diffusion in QCD matter : Plasma vs Glasma  | ., Pooja                  |
| 2:40 PM | [104] (15) A Study go gamma p -> KsKsp with the GlueX Experiment   | RODRIGUEZ LINERA, Gabriel |
| 2:45 PM | [105] (16) Saturation Corrections for the High Momentum Spectrometer in Hall C   | MURPHY, Jacob             |
| 2:55 PM | [107] (18) Probing gluon Sivers function through prompt photon production.   | PADVAL, Siddhesh          |
| 3:00 PM | [108] (19) Synchrotron Radiation Background Studies for an EIC   | PLOEN, Christine          |
| 3:05 PM | [109] (20) A Study of Time-Like Compton Scattering on the Neutron, and a Look into the Feasibility of TCS at the Electron Ion Collider               | GATES, Kayleigh           |
| 3:15 PM | [112] (22) Measuring Longitudinal Beam Polarization Using Moller Polarimetry: Magneto Optical Kerr Effect  | EVANS, Katherine          |
| 3:20 PM | [111] (23) The Constituent Counting Rule and Omega Photoproduction   | REED, Trevor              |
| 3:25 PM | [113] (24) Elastic Compton scattering on $^3\text{He}$ at HIGS   | ZHOU, Jingyi              |
| 3:30 PM | [114] (25) Charge Symmetry Violation Quark Distributions via Precise Measurement of $\pi^+/\pi^-$ Ratios in Semi-inclusive Deep Inelastic Scattering | JIA, Shou                 |
| 3:35 PM | [115] (26) Measuring the Deuterium Inclusive and Semi-Inclusive Pion Production Cross Section in CLAS12  | FOGLER, Caleb             |

# Thursday, June 17, 2021

## Student seminars (9:00 AM - 10:00 AM)

-Conveners: Chair: Astrid

| time    | [id] title   | presenter                  |
|---------|--|----------------------------|
| 9:00 AM | [70] Magnetic field effect on Higgs boson production rate through gluon fusion | JABER-URQUIZA, Jorge       |
| 9:15 AM | [71] Relations between TMDs and GPDs in light front quark diquark model(LFQDM) | CHOUDHARY, Poonam          |
| 9:30 AM | [72] Global fits in TMD phenomenology  | CERUTTI, Matteo            |
| 9:45 AM | [73] Exclusive Double Drell-Yan factorization and GTMDs                        | GUTIERREZ, Patricia Andrea |

## Student seminars (10:15 AM - 11:00 AM)

-Conveners: Chair: Astrid

| time     | [id] title   | presenter            |
|----------|--|----------------------|
| 10:15 AM | [74] Search for very strange dibaryon  | NICOL, Matthew       |
| 10:30 AM | [75] Probing linearly polarized gluon distribution in J/psi electroproduction at electron-ion collider | KISHORE, Raj         |
| 10:45 AM | [76] Manifestation of quantum correlation in the helicity amplitudes                                   | DAYANANDA, Deepasika |

## Student seminars (11:15 AM - 12:00 PM)

-Conveners: Chair: Juan

| time     | [id] title   | presenter                      |
|----------|--|--------------------------------|
| 11:15 AM | [77] The Gen-RP Experiment and Neutron Electromagnetic Form Factor Measurements on the SBS at JLab             | BOYD, John                     |
| 11:30 AM | [78] The D-Term: Last Item on the Checklist  | DOTSON, Andrew                 |
| 11:45 AM | [79] Transverse momentum dependent cross-section factorization for dijet and heavy-meson pair processes in DIS | FERNÁNDEZ DEL CASTILLO, Rafael |

## Student seminars (1:00 PM - 2:00 PM)

-Conveners: Chair: Juan

| time    | [id] title   | presenter            |
|---------|--|----------------------|
| 1:00 PM | [80] Double Target system for the Run Group E experiment in CLAS12                             | RIOS, Rene           |
| 1:15 PM | [81] NLO Corrections to Di-Hadron Production in DIS Using the Color Glass Condensate Formalism | BERGABO, Filip       |
| 1:30 PM | [82] Helicity Evolution at Small x: the Single-Logarithmic Contribution                        | TAWABUTR, Yossathorn |
| 1:45 PM | [83] Overview of MUSE Experiment   | LIN, Wan             |

## Student seminars (2:15 PM - 3:00 PM)

-Conveners: Chair: Alex

| time    | [id] title   | presenter               |
|---------|--|-------------------------|
| 2:15 PM | [84] Probing the Spin Structure of the Nucleon: Neutron $g_2$ and $d_2$  | ROY, Murchhana          |
| 2:30 PM | [85] Study of D0 mesons-hadrons femtoscopic correlations within STAR experiment                                | ROY CHOWDHURY, Priyanka |
| 2:45 PM | [86] Measurement of p+d/p+p charmonium cross section ratio with 120 GeV proton beam in the SeaQuest experiment | LEUNG, Ching Him        |

### **Student seminars (3:15 PM - 4:00 PM)**

**-Conveners: Chair: Alex**

| time    | [id] title  | presenter                   |
|---------|---|-----------------------------|
| 3:15 PM | [87] Momentum tomography of light mesons                | KAUR, Satvir                |
| 3:30 PM | [88] JAM-small x Phenomenology                          | ADAMIAK, Daniel             |
| 3:45 PM | [89] Probing nucleon structure at next-to-leading order | MARTINEZ -FERNANDEZ, Victor |

# Friday, June 18, 2021

## Student seminars (9:00 AM - 10:00 AM)

-Conveners: Chair: Filippo

| time    | [id] title  | presenter             |
|---------|---|-----------------------|
| 9:00 AM | [60] Jlab SBS Program to Measure Nucleon Elastic Electromagnetic Form Factors at High $Q^2$ and "Gas Electron Multiplier" Detectors | RATHNAYAKE, Anuruddha |
| 9:15 AM | [61] Pion parton distribution functions in the light-front formalism  | VENTURINI, Simone     |
| 9:30 AM | [62] Beam Asymmetry measurement from $\eta'$ photoproduction and its -t dependence  | PAUDEL, Churamani     |
| 9:45 AM | [63] Pion SIDIS analysis from RG-A  | CAPOBIANCO, Richard   |

## Student seminars (10:15 AM - 11:00 AM)

-Conveners: Chair: Filippo

| time     | [id] title  | presenter       |
|----------|---|-----------------|
| 10:15 AM | [64] Looking Ahead to 22 GeV: A1n in Hall C                   | COTTON, Cameron |
| 10:30 AM | [65] Investigating the gluonic structure of proton at small-x | KUMAR, Arjun    |
| 10:45 AM | [66] phi mesons in dense and strange hadronic matter          | KUMAR, Rajesh   |

## Student seminars (11:15 AM - 12:00 PM)

| time     | [id] title  | presenter         |
|----------|---|-------------------|
| 11:15 AM | [67] Study of the $\Lambda/\Sigma^0$ electroproduction at JLab Hall A   | OKUYAMA, Kazuki   |
| 11:30 AM | [68] Measurement of Polarization Observables and Beam-Spin Asymmetry for Double Pion Electroproduction off the Proton | MCLAUCHLIN, Chris |
| 11:45 AM | [69] Cancellation of Infrared Divergences using Coherent States   | BHAMRE, Deepesh   |

## Student seminars: Prize Ceremony and Farewell (3:15 PM - 4:45 PM)

-Conveners: Chair: