APCTP Focus Program in Nuclear Physics 2022: Hadron Physics Opportunities with JLab Energy and Luminosity Upgrade

Monday, July 18, 2022

Session: 1 - Classroom 512 (9:00 AM - 10:20 AM)

-Conveners: Yongseok Oh

| time | [id] title | presenter |
|----------|--|-----------------|
| 9:00 AM | [16] Hadron physics with CLAS12 at energies up to 24 GeV. | BURKERT, Volker |
| 9:30 AM | Discussion | |
| 9:40 AM | [21] Applications of the gauge/gravity duality to hadron physics | JARVINEN, Matti |
| 10:10 AM | Discussion | |

Session: 2 - Classroom 512 (10:40 AM - 11:50 AM)

-Convenies: Ho-Meoyng Choitime[id] titlepresenter10:40 AM[6] Probing Nuclear Structure at Extreme ConditionsSARGSIAN, Misaka11:10 AMDiscussionConcent11:20 AM[5] Photo- and electro-production of ϕ meson on the nucleon and 4HeKIM, Sangho11:40 AMDiscussionConcent

Tuesday, July 19, 2022

Session: 3 - Classroom 512 (9:00 AM - 10:20 AM)

-Conveners: Timothy Hayward

| time | [id] title | presenter |
|----------|---|------------|
| 9:00 AM | [38] Overview of transverse momentum dependent parton distributions * | YUAN, Feng |
| 9:30 AM | Discussion | |
| 9:40 AM | [30] Transverse-Momentum-Dependent Proton Structures from Lattice QCD * | ZHAO, Yong |
| 10:10 AM | Discussion | |

Session: 4 - Classroom 512 (10:40 AM - 12:00 PM)

-Conveners: Victor Mokeev

| time | [id] title | presenter |
|----------|--|----------------------|
| | [29] Nucleon spin structure studies at COMPASS: recent results and prospects | PARSAMYAN, Bakur |
| 11:10 AM | Discussion | |
| 11:20 AM | [18] The SoLID Science Program at 12 GeV and Beyond | MEZIANI, Zein-Eddine |
| 11:50 AM | Discussion | |

Session: 5 - Classroom 512 (2:00 PM - 4:00 PM)

-Conveners: Kyungseon Joo

| time | [id] title | presenter |
|---------|---|--------------------|
| 2:00 PM | [25] JLab Upgrade Opportunities for SIDIS Dihadrons at CLAS * | DILKS, Christopher |
| 2:30 PM | Discussion | |
| 2:40 PM | [24] Nuclear hadronization studies JLab: present and future | HAKOBYAN, Hayk |
| 3:10 PM | Discussion | |
| 3:20 PM | [12] Fixed targets at LHC * | DI NEZZA, Pasquale |
| 3:50 PM | Discussion | |

Wednesday, July 20, 2022

Session: 6 - Classroom 512 (9:00 AM - 10:20 AM)

-Conveners: Hayk Hakobyan

| time | [id] title | presenter |
|----------|--|------------------|
| 9:00 AM | [3] Fracture functions formalism for hadron production from the target remnant in hard processes | KOTZINIAN, Aram |
| 9:30 AM | Discussion | |
| 9:40 AM | [17] Accessing Target Fragmentation: Prospects and Results from CLAS | HAYWARD, Timothy |
| 10:10 AM | Discussion | |

Session: 7 - Classroom 512 (10:40 AM - 12:00 PM)

-Conveners: Harut Avagyan

| time | [id] title | presenter |
|----------|--|----------------|
| 10:40 AM | [10] Confinement, Color Vortices and Nonperturbative Structures in QCD | SIVERS, Dennis |
| 11:10 AM | Discussion | |
| 11:20 AM | [26] Matching of fracture functions for SIDIS in target fragmentation region $*$ | TONG, Xuanbo |
| 11:50 AM | Discussion | |

Thursday, July 21, 2022

Session: 8 - Classroom 512 (9:00 AM - 10:20 AM)

-Conveners: Zein-Eddine Meziani

| time | [id] title | presenter |
|----------|---|---------------------|
| 9:00 AM | [2] Theoretical simulation of the virtual meson production in the forward direction | JI, Chueng-Ryong |
| 9:30 AM | Discussion | |
| 9:40 AM | [20] Radiative effects in polarized SiDIS | ILYICHEV, Alexander |
| 10:10 AM | Discussion | |

Session: 9 - Classroom 512 (10:40 AM - 12:10 PM)

-Conveners: Misak Sargsian

| time | [id] title | presenter |
|----------|--|------------------------------------|
| 10:40 AM | [13] Light quark distribution functions in the heavy baryon within a chiral quark-soliton approach | SON, Hyeon-Dong |
| 11:00 AM | Discussion | |
| | [15] Analysis of the virtual meson production in a (1+1)-dimensional scalar field model | CHOI, Yongwoo |
| 11:30 AM | Discussion | |
| 11:40 AM | [7] Generalized parton distributions for the Goldstone boson | HUTAURUK, Parada Tobel Paraduan |
| 12:00 PM | Discussion | |

Session: 10 - Classroom 512 (2:00 PM - 3:20 PM)

-Conveners: Bakur Parsamyan

| time | [id] title | presenter |
|---------|--|---------------|
| 2:00 PM | [28] Polarized vector meson production in semi-inclusive DIS * | CHEN, Kai-bao |
| 2:30 PM | Discussion | |
| 2:40 PM | [14] Vector meson production in polarized string fragmentation in Pythia * | KERBIZI, Albi |
| 3:10 PM | Discussion | |

Session: 11 - Classroom 512 (3:40 PM - 4:20 PM)

-Conveners: Andrey Kim

| time | [id] title | presenter |
|---------|--|--------------------|
| 3:40 PM | [9] Extractions of TMD distributions from the SIDIS data * | VLADIMIROV, Alexey |
| 4:10 PM | Discussion | |

Friday, July 22, 2022

Session: 12 - Classroom 512 (9:00 AM - 10:20 AM)

-Conveners: Aram Kotzinian

| time | [id] title | presenter |
|----------|---|----------------------------------|
| 9:00 AM | [23] Hard exclusive reactions with baryon number transfer: status and perspectives. | SEMENOV-TYAN-SHANSKIY, Kirill |
| 9:30 AM | Discussion | |
| 9:40 AM | [1] Studies of exclusive processes at JLab Hall-A/C | ROCHE, Julie |
| 10:10 AM | Discussion | |

Session: 13 - Classroom 512 (10:40 AM - 12:00 PM)

-Conveners: Julie Roche

| time | [id] title | presenter |
|----------|--|----------------------|
| 10:40 AM | [31] What can we learn on GPDs from Lattice QCD * | CONSTANTINOU, Martha |
| 11:10 AM | Discussion | |
| 11:20 AM | [27] Deeply Virtual Meson Electroproduction at Jefferson Lab with CLAS12 | KIM, Andrey |
| 11:50 AM | Discussion | |

Session: 14 - Classroom 512 (2:00 PM - 3:20 PM)

-Conveners: Kirill Semenov-Tyan-Shanskiy

| time | [id] title | presenter |
|---------|---|-----------------|
| 2:00 PM | [37] Recent GPD developments obtained with PARTONS framework * | SZNAJDER, Paweł |
| 2:30 PM | Discussion | |
| 2:40 PM | [33] Deeply Virtual Compton Scattering with CLAS12 at Jefferson Lab | HOBART, Adam |
| 3:10 PM | Discussion | |

Session: 15 - Classroom 512 (3:40 PM - 4:20 PM)

-Conveners: Alexander Ilyichev

| time | [id] title | presenter |
|---------|---|----------------|
| 3:40 PM | [11] 3D Structure of the Nucleon: from JLab12 to JLab24 | AVAGYAN, Harut |
| 4:10 PM | Discussion | |

Saturday, July 23, 2022

Session: 16 - Classroom 512 (9:00 AM - 10:30 AM)

-Conveners: Chueng-Ryong Ji

| time | [id] title | presenter |
|----------|---|----------------|
| 9:00 AM | [19] Insight into Emergence of Hadron Mass in the Exploration of N* Structure at JLab after Energy and Luminosity Increase | MOKEEV, Victor |
| 9:30 AM | Discussion | |
| 9:40 AM | [32] Exclusive Processes and GPDs | JOO, Kyungseon |
| 10:10 AM | Discussion | |
| 10:20 AM | [34] Concluding Remarks | JOO, Kyungseon |