

Session Program

19-24 Oct 2024



Workshop on Advances, Innovations, and Future Perspectives in High-Energy Nuclear Physics

Plenary

Wuhan, China

Sunday 20 October

10:10

Plenary: session 1

Session | **Location:** Wuhan, China | **Convener:** Yugang Ma

10:10–10:40

Little Bang at Big Colliders: 40 years of ultra-relativistic heavy ion physics

Speaker

Jurgen Schukraft

10:40–11:05

China-France cooperation and achievement

Speaker

Nicole Bastid

11:05–11:30

From PHOS to FoCal - 25 years of collaboration CCNU-UiB

Speaker

Dieter Roehrich

11:30–11:55

China-Italy cooperation and achievement

Speaker

Andrea Rossi

11:55–12:20

ALICE-China cooperation and achievement

Speaker

Daicui Zhou

12:20

14:00

Plenary: session 2

Session | **Location:** Wuhan, China | **Convener:** Nu Xu

14:00–14:30

ALICE Highlights

Speaker

Kai Schweda

14:30–15:00

LHCb Highlights

Speaker

Xianglei Zhu

15:00–15:30

CMS Highlights

Speaker

Zhenyu Chen

15:30–16:00

ATLAS Highlights

Speaker

Qipeng Hu

16:00

16:20

Plenary: session 3**Session** | **Location:** Wuhan, China | **Convener:** Yves Schutz

16:20–16:50

Science, and reconstruction of hadronic events at the CEPC**Speaker**

Manqi Ruan

16:50–17:20

Study of QCD phase structure at RHIC**Speaker**

Nu Xu

17:20–17:50

Probe element synthesis in star with deep underground JUNA facility**Speaker**

Weiping Liu

17:50–18:25

Collectivity: Prospects and Future Directions**Speaker**

Jiangyong Jia

18:25

Monday 21 October

08:30

Plenary: session 4

Session | **Location:** Wuhan, China | **Convener:** Xinnian Wang

08:30–09:00

Heavy quark production in magnetic and rotational fields

Speaker

Pengfei Zhuang

09:00–09:30

Global quark spin correlations in relativistic heavy ion collisions

Speaker

Zuo-tang Liang

09:30–10:00

Soft physics for high energy nucleus-nucleus collisions

Speaker

Huichao Song

10:00–10:30

Heavy flavour production in LHCb

Speaker

Jibo He

10:30

10:50

Plenary: session 5

Session | **Location:** Wuhan, China | **Convener:** Prof. Xu-Guang Huang

10:50–11:20

Density dependent QCD effects in pp collisions

Speaker

Andreas Morsch

11:20–11:50

Parton fragmentation from vacuum to nuclear medium

Speaker

Hongxi Xing

11:50–12:20

Light and heavy flavor jet quenching in relativistic heavy-ion collisions

Speaker

Shanshan Cao

12:20

14:00

Plenary: session 6

Session | **Location:** Wuhan, China | **Convener:** Zebo Tang

14:00–14:30

The ALICE upgrade program

Speaker

Marco Van Leeuwen

14:30–15:00

The development of Si detector in ALICE: from ITS2 to ITS3

Speaker

Alessandra Fantoni

16:00

15:00–15:30 ALICE detector development at CCNU**Speaker**

Zhong-Bao Yin

16:20

15:30–16:00 ALICE 3 physics programme**Speaker**

Antonin Maire

Plenary: session 6**Session** | **Location:** Wuhan, China | **Convener:** Qinghua Xu**16:20–16:25 Greetings****Speaker**

Silvia Masciocchi

16:25–16:50 Prospects and challenges for LHCb upgrades**Speaker**

Manuel Guittiere

16:50–17:15 MAPS chip R&D at CCNU**Speaker**

Xiangming Sun

17:15–17:45**Efficient scientific computing with the ALICE event processing nodes GPU-based farm****Speaker**

Federico Ronchetti

17:45–18:15 Detector development at CIAE**Speaker**

Xiaomei Li

18:15

Tuesday 22 October

08:30

Plenary: session 7

Session | **Location:** Wuhan, China | **Convener:** Zhongzhou Ren

08:30–08:55

Experimental insights from CMS in ultra-peripheral collisions

Speaker

Shuai Yang

08:55–09:20

Jet quenching and medium-response

Speaker

Zhong Yang

09:20–09:45

Probing the flavour dependence of parton showers

Speaker

Nima Zardoshti

09:45–10:10

Study of EEC discrimination power on quark and gluon quenching effects in heavy-ion collisions at 5.02 TeV

Speaker

Wei Dai

10:10

10:30

Plenary: session 8

Session | **Location:** Wuhan, China | **Convener:** Fengshou Zhang

10:30–10:55

How far can we see back in time in high-energy collisions using charm hadrons?

Speaker

Gergely Gabor Barnafoldi

10:55–11:20

Lattice determination of heavy quark diffusion

Speaker

Mr HaiTao Shu

11:20–11:45

Cold nuclear matter effects on jet production at the LHC

Speaker

Dr Dingyu Shao

11:45–12:10

Classical description of quark interactions

Speaker

Zhiguang Tan

12:10

14:00

Plenary: session 9

Session | **Location:** Wuhan, China | **Convener:** DF Hou

14:00–14:25

Isolated photon production in pp, pPb and PbPb collisions measured with ALICE

	<p>Speaker Gustavo Conesa Balbastre</p>
	<p>14:25–14:50 QCD Challenges</p> <p>Speaker Mihai Petrovici</p>
	<p>14:50–15:15 Observation of the Antimatter Hypernucleus Antihyperhydrogen-4</p> <p>Speaker Hao Qiu</p>
	<p>15:15–15:40 Multiplicity-dependent quarkonium production</p> <p>Speaker Antonio Uras</p>
15:40	
16:00	<p>Plenary: session 10 Session Location: Wuhan, China Convener: Jurgen Schukraft</p>
	<p>16:00–16:25</p> <p>Testing CPT symmetry with multi-strange baryons mass precision measurements using ALICE</p> <p>Speaker Romain Schotter</p>
	<p>16:25–16:50 Quarkonium production in heavy-ion collisions</p> <p>Speaker Xiaozhi Bai</p>
	<p>16:50–17:15 Quarkonium production in pp and p-Pb collisions</p> <p>Speaker Victor Jose Gaston Feuillard</p>
	<p>17:15–17:40 Prompt/non-prompt Jpsi production in ALICE</p> <p>Speaker Maurice Coquet</p>
	<p>17:40–18:05</p> <p>Quarkonium photoproduction in peripheral PbPb and ultra-peripheral collisions</p> <p>Speaker Ionut Cristian Arsene</p>
18:05	

Wednesday 23 October

08:30

Plenary: session 11

Session | **Location:** Wuhan, China | **Convener:** Xiaoming Zhang

08:30–08:55 **HBT correlation in heavy-ion collisions with a hard process**

Speaker

Prof. Weiyao Ke

08:55–09:20 **Overview of recent HF highlights results**

Speaker

Cristina Terrevoli

09:20–09:45

Overview of experimental results on open heavy-flavour hadronization

Speaker

Andrea Rossi

09:45–10:10 **Probing the quark-gluon plasma with heavy-flavour hadrons**

Speaker

Fabrizio Grosa

10:10

10:30

Plenary: session 12

Session | **Location:** Wuhan, China | **Convener:** Dr Yapeng Zhang

10:30–10:55 **Spin polarization in A+A and p+A collisions**

Speaker

Shi Pu

10:55–11:20

Spin polarization phase transition and transportation of QGP at finite temperature in the presences of magnetic field and rotation

Speaker

Sheng-Qin Feng

11:20–11:45

Distilling circularly polarized photon emission from magnetized chiral plasmas

Speaker

Xinyang Wang

11:45–12:10

Spin polarization of Λ hyperons along beam direction in p+Pb collisions using hydrodynamic approaches

Speaker

Cong Yi

12:10

14:00

Plenary: session 13**Session** | **Location:** Wuhan, China | **Convener:** Zaochen Ye

14:00–14:25

Collectivity from the STAR BES program**Speaker**

Shusu Shi

14:25–14:50

Extraction of sound velocity in ultra-central heavy-ion collisions**Speaker**

Li Yan

14:50–15:15

Imaging shapes of atomic nuclei in High-Energy Nuclear collisions**Speaker**

Chunjian Zhang

15:15–15:40

Probing collectivity with fluctuations of the pt spectrum**Speaker**

Jean-Yves OLLITRAULT

15:40–16:05

W and Z production in hadronic collisions with ALICE**Speaker**

Diego Stocco

16:05

16:25

Plenary: session 14**Session** | **Location:** Wuhan, China | **Convener:** Dieter Roehrich

16:25–16:50

Unveiling the origin of QGP-like effects in pp and p-Pb collisions using flattenicity**Speaker**

Antonio Ortiz Velasquez

16:50–17:15

Constraining the gluon helicity at STAR**Speaker**

Ting Lin

17:15–17:40

Anisotropic flow measurements in small collision systems**Speaker**

Mingrui Zhao

17:40

Thursday 24 October

09:00

Plenary: session 15

Session | **Location:** Wuhan, China | **Convener:** Heng-Tong Ding

09:00–09:25

Deep learning for nuclear equation of state at extreme conditions

Speaker

LongGang Pang

09:25–09:50

Exploring nuclear structure with multiparticle azimuthal correlations at the LHC

Speaker

Zhiyong Lu

09:50–10:15

External magnetic field induced paramagnetic squeezing effect in heavy-ion collisions at the LHC

Speaker

Zefang Jiang

10:15

10:35

Plenary: session 16

Session | **Location:** Wuhan, China | **Convener:** Guangyou Qin

10:35–11:00

Nonperturbative heavy quark transport in a semi-Quark-Gluon-Plasma

Speaker

Shuang Li

11:00–11:25

Search for the chiral magnetic effect with forced match of multiplicity and elliptic flow in isobar collisions at STAR

Speaker

Dr Yufu Lin

11:25–11:50

Exotic states production in nuclear collisions at the LHC energy

Speaker

Zhilei SHE

11:50–12:15

Closing Remarks

Speaker

Xiaoming Zhang

12:15