

WORKSHOP AGENDA

Oct. 18, 2026 Afternoon

Place: Lobby of Golden Eagle Shangmei Hotel (1st floor)

14:00-20:30

Registration

Oct. 19, 2026 Morning

Place: Golden Eagle Hall C (5th floor)

Opening Session

Chair: DongDong Gu

08:45-09:15

Opening and Conference Photo

Session 1

Chair: XiaoTao He

09:15-09:30

Dmitry Kazakov
(BLTP/JINR)

Non-renormalizable theories: from weak interactions to cosmology

09:35-09:50

Jie Meng
(Peking University)

Quantum chirality

09:55-10:10

YuMin Zhao
(Shanghai JiaoTong University)

Nucleon-pair approximation of the nuclear shell model

10:15-10:30

Valentin Nesterenko
(BLTP/JINR)

Microscopic analysis of scissor mode in ^{254}No

10:35-11:00

Coffee Break

Session 2

Chair: Nikolai Antonenko

11:00-11:15

ZhiYuan Zhang
(IMP/CAS)

SHE studies at the gas-filled recoil separators in IMP

11:20-11:35

HongFu Li
(IMP/CAS)

First mass measurements of short-lived nuclei with isochronous mass spectrometry at HIAF-SRing

11:40-11:55

Igor Izosimov
(FLNR/JINR)

Wigner's SU(4) spin-isospin symmetry and MNT & fragmentation nuclear reactions

12:00-12:15

XiangXiang Sun
(ITP/CAS)

Emergence of the nuclear halo in C-22: bridging shape and shell

12:20-12:35

ZhiCheng Xu
(Fudan University)

Exotic structure and mirror symmetry breaking of dripline nuclei

12:40-14:00

Lunch (Western Restaurant) (5th floor)

WORKSHOP AGENDA

Oct. 19, 2026 Afternoon

Place: Golden Eagle Hall C (5th floor)

Session 3

Chair: ZaiGuo Gan / CaiWan Shen

14:00-14:15	PengWei Zhao (Peking University)	Exotic nuclear shapes: from structure to dynamics
14:20-14:35	MingMing Zhang (IMP/CAS)	Investigation of the reaction $^{40}\text{Ca} + ^{175}\text{Lu} \rightarrow ^{215}\text{Pa}^*$ and new isotope ^{210}Pa
14:40-14:55	QiBo Chen (East China Normal University)	Quantum entanglement in the nuclear collective motion
15:00-15:15	Dong Bai (Hohai University)	Spin teleportation of protons at the MeV scale
15:20-15:35	Wu Wang (ITP/CAS)	Probing variations of fundamental constants with hyperfine electronic bridge transitions in ^{229}Th
15:40-16:10	Coffee Break	

Session 4

Chair: ZhongZhou Ren / XianRong Zhou

16:10-16:25	Ivan Rogov (BLTP/JINR)	Dinuclear system model in description of alpha-decay and spontaneous fission processes
16:30-16:45	Bo Zhou (Fudan University)	Exploring novel cluster structures in light nuclei
16:50-17:05	Azam Rahmatinejad (BLTP/JINR)	Toward a dinuclear-system description of cluster states in medium-mass $N \approx Z$ nuclei
17:10-17:25	YiBin Qian (NJUST)	Cluster degrees of freedom in nuclear structure and decay
17:30-17:45	Anna Bezbakh (BLTP/JINR)	Analysis of alpha-decay chains of elements 119 and 120 in the two-center shell model: competition between allowed and forbidden transitions
17:50-18:05	Zhen Wang (Tongji University)	Calculations of alpha decay and cluster decay half-lives for heavy and superheavy nuclei
18:30-20:30	Conference Dinner (Golden Eagle Hall B) (5 th floor)	

WORKSHOP AGENDA

Oct. 20, 2026 Morning

Place: Golden Eagle Hall C (5th floor)

Session 5

Chair: FengShou Zhang / XiaoJun Bao

08:30-08:45	Ning Wang (Guangxi Normal University)	Systematic study of capture and evaporation residue cross sections
08:50-09:05	GaoLong Zhang (Beihang University)	Study of reaction mechanism of weakly bound nuclei at energies around Coulomb barrier
09:10-09:25	HuiMing Jia (CIAE)	Revisit the multi-nucleon transfers in $^{12}\text{C} + ^{209}\text{Bi}$ near the Coulomb barrier
09:30-09:45	PeiWei Wen (CIAE)	Study of quantum tunneling behavior in nuclear reactions based on the coupled-channels model
09:50-10:05	Wei Ye (Southeast University)	First-chance fission and nuclear dissipation
10:10-10:25	DanDan Zhang (ITP/CAS)	Multinucleon transfer reactions with relativistic TDDFT
10:30-11:00	Coffee Break	

Session 6

Chair: YuHu Zhang / SuYaLaTu Zhang

11:00-11:15	Chong Qi (KTH Royal Institute of Technology)	Theoretical proof of the Strutinsky energy theorem, foundations of nuclear DFT and future applications
11:20-11:35	Costel Petrache (Paris-Saclay University; IMP/CAS)	Collectivity and shape coexistence in $A = 120$ proton-rich nuclei
11:40-11:55	Huben Ganev (BLTP/JINR)	A microscopic shell-model counterpart of the particle-core-type models: the low-lying rotational bands in ^{163}Dy
12:00-12:15	Anshul Dadwal (NUAA)	Empirical constraints on microscopic nuclear structure in $A \sim 250$ mass region
12:20-12:30	YeRuoXi Chen (East China Normal University)	Structure of ^{233}Th in octupole core-quasiparticle coupling model
12:35-14:00	Lunch (Western Restaurant) (5 th floor)	

WORKSHOP AGENDA

Oct. 20, 2026 Afternoon

Place: Golden Eagle Hall C (5th floor)

Session 7

Chair: LiGang Cao / ZhongMing Niu

14:00-14:15	Hiroyuki Sagawa (RIKEN; University of Aizu)	Gamow-Teller transitions in $N = Z$ nuclei and electron capture rates in rp process
14:20-14:35	Taka Kajino (Beihang University; University of Tokyo; NAOJ)	Origin of elements: from the Big-Bang to stellar explosions
14:40-14:55	Alexey Severyukhin (BLTP/JINR)	Gamow-Teller transition studies within quasiparticle phonon model
15:00-15:15	WeiZhou Jiang (Southeast University)	Dark matter and its impact on the scaling relation in neutron stars
15:20-15:35	XiaoBao Wang (Huzhou Normal University)	Gamow shell model studies of selected radiative-capture reactions in nuclear astrophysics
15:40-16:10	Coffee Break	

Session 8

Chair: Gurgen Adamian / Chang Xu

16:10-16:25	Alan Dzhioev (BLTP/JINR)	Isoenergetic description of induced fission pathways within energy-density functional theory
16:30-16:45	Timur Shneidman (BLTP/JINR)	Description of correlations between fission observables in the spontaneous fission of ^{252}Cf
16:50-17:05	Alexander Andreev (BLTP/JINR)	Stochastic approach to superheavy-nucleus fission within the dinuclear system concept
17:10-17:25	JingJing Li (NUAA)	Systematic analysis of input parameters for the synthesis of superheavy nuclei based on DNS model
17:30-17:45	Evgenii Mardyban (BLTP/JINR)	Isotopic trends in fission thresholds for $Z = 114$ and $Z = 120$ nuclei
17:50-18:05	Vladimir Kondratyev (BLTP/JINR)	Properties and synthesis of magnetized heavy nuclei
18:10-19:30	Dinner (Western Restaurant) (5 th floor)	

WORKSHOP AGENDA

Oct. 20, 2026 Evening		
Place: Conference Hall 2-3 (7th floor)		
Session 9		
Chair: TianHeng Huang / YuTing Rong		
19:30-19:40	Farrukh Otakhonov (BLTP/JINR)	Induced decay of binary fission fragments during their passage through a solid foil
19:45-19:55	JinTian Liu (ITP/CAS)	Role of the scission-line structure in the formation of the fragment-mass distribution in ^{180}Hg fission
20:00-20:10	YuMeng Wang (Jiangnan University)	Shell structure and spontaneous decay of superheavy $Z = 124$ isotopes with the deformed relativistic Hartree-Bogoliubov theory in continuum
20:15-20:25	HaoYu Liu (NUAA)	Systematic study on fusion evaporation reactions induced by ^{48}Ca - ^{55}Mn projectiles
20:30-20:40	ZiHan Wang (South China University of Technology)	Preequilibrium cluster emission and systematics on the formation cross sections of superheavy nuclei (SHN)
20:45-21:05	Break	
21:05-21:15	Igor Dementev (BLTP/JINR)	Moment of inertia of strongly deformed configuration
21:20-21:30	WenJia Wang (University of Electronic Science and Technology of China)	Effective range expansion with the left-hand cut: higher order improvements
21:35-21:45	Xin Lian (Sichuan University)	Ab initio correlations between two-neutrino and neutrinoless double-beta decays in ^{48}Ca
21:50-22:00	XiaoYang Ren (Yangzhou University)	Shell effects on the equation of state of the neutron-star crust



WORKSHOP AGENDA

Oct. 21, 2026 Morning

Place: Golden Eagle Hall C (5th floor)

Session 10

Chair: Wei Zuo / NaiBo Zhang

08:30-08:45	Evgeni Kolomeitsev (BLTP/JINR)	Vortical and accelerated medium heavy-ion collisions within the NICA energy range and hyperon polarization
08:50-09:05	JinNiu Hu (Nankai University)	Vortex nucleon-nucleon scattering
09:10-09:25	Nikolay Arsenyev (BLTP/JINR)	Fine structure of giant resonances: I. isoscalar giant monopole resonance
09:30-09:45	Yury Uzikov (DLNP/JINR)	The reactions $dd \rightarrow dd\pi\pi$ and $pd \rightarrow pd\pi\pi$ and dibaryon resonances
09:50-10:05	PengCheng Li (Huzhou Normal University)	In-medium effect on the NN cross section in HICs at intermediate energies
10:10-10:25	XiuLei Ren (Shandong University)	Meson-baryon interactions in covariant ChEFT
10:30-11:00	Coffee Break	

Session 11

Chair: Timur Shneidman / DingWei Zhang

11:00-11:15	Nikolay Volchanskiy (BLTP/JINR)	Renormalon-chain contributions to two-point correlators of nonlocal quark currents and light-meson distribution amplitudes
11:20-11:35	Kanat Nurlan (JINR; INP, Kazakhstan)	Processes of meson production in electron-positron annihilation and tau-decays within the NJL model
11:40-11:55	QingHua He (NUAA)	Beam asymmetries of $\pi(0)\eta$ photoproduction off protons in the energy region of 1.3-2.4 GeV
12:00-12:15	TongQi Liang (Ocean University of China)	Nuclear contacts and their scaling with nuclear radii
12:20-12:30	WeiFeng Li (Anhui University)	Predictions of nuclear charge radii with a physics-information machine learning approach
12:35-14:00	Lunch (Western Restaurant) (5 th floor)	

WORKSHOP AGENDA

Oct. 21, 2026 Afternoon

Place: Golden Eagle Hall C (5th floor)

Session 12

Chair: Alexey Severyukhin / Li Ou

14:00-14:15	Alexey Larionov (BLTP/JINR)	Cumulative proton production in relativistic proton-deuteron collisions
14:20-14:35	Serge Bondarenko (BLTP/JINR)	Pion off-shell form factors in the Bethe-Salpeter approach
14:40-14:55	Alexey Zhevlakov (BLTP/JINR)	Electric dipole moments of nucleons, deuterons and hyperons induced by CP violating couplings of pseudoscalar mesons.
15:00-15:15	Aidos Issadykov (JINR; INP, Kazakhstan)	Rare B meson decays
15:20-15:30	Dmitrij Smoliannikov (MSU; JINR)	Skyrme-type energy density functional with surface-peaked effective mass
15:35-16:05	Coffee Break	

Session 13

Chair: MingHui Huang / ZhenHua Zhang

16:05-16:20	WenHui Long (Lanzhou University)	Relativistic Hartree-Fock theory and recent progresses
16:25-16:40	Jian Li (Jilin University)	Microscopic approaches to the nuclear level density in relativistic density functional theory
16:45-17:00	Sasha Tomalak (ITP/CAS)	Radiative corrections in inverse beta decay at low energies
17:05-17:20	Iyabo Usman (University of the Witwatersrand)	Can octupole vibrations on the fine structure of the ISGMR in ²⁰⁸ Pb enrich its energy scales?
17:25-17:40	Xiao Lu (ITP/CAS)	Deformed neutron halo nuclei and soft dipole excitations in the 40 < A < 90 mass region
17:45-17:55	WanHui Li (Sichuan University)	E1 and M1 strength in Ni isotopes within continuum QRPA
18:00-18:10	YiMing Jiang (ITP/CAS)	Flatness of landscape near the “island of stability” of superheavy nuclei
18:15-20:00		

WORKSHOP AGENDA

Oct. 22, 2026 Morning

Place: Meeting Room B501, Materials Building, East Campus, NUAU

Session 14

Chair: XiaoHong Zhou / ChunLin Bai

09:45-10:00	Yang Sun (Shanghai Jiao Tong University)	Are highly excited nuclear states merely chaotic?
10:05-10:20	YuanMing Xing (IMP/CAS)	Advances in mass measurements of exotic nuclei: from CSRe to SRing
10:25-10:40	HanKui Wang (Zhejiang Sci-Tech University)	Systematic ground-state energy-level inversions across the $N = 79$ and $N = 81$ isotonic chains
10:45-11:00	MengJiao Lyu (NUAA)	Research on nuclear cluster states based on generative models
11:05-11:20	Qian Wang (IMP/CAS)	Schottky mass and decay spectroscopy of exotic nuclei at HIAF-SRing
11:25-11:40	Yonggoo Heo (BLTP/JINR)	QCD in the chiral $SU(3)$ limit from baryon masses on lattice QCD ensembles
11:45-11:55	Mikhail Kosarev (BLTP/JINR; MSU)	Gamma de-excitation of ^{90m}Zr isomer

Closing Session

Chair: ShanGui Zhou

12:00-12:20	Closing
12:35-13:35	Lunch (Cuiping Garden Restaurant)

Oct. 22, 2026 Afternoon

14:05-18:05	Free Discussion
-------------	-----------------

Oct. 23, 2026

08:00-18:00	Departure
-------------	-----------

