

The XV-th International School-Conference "The Actual Problems of Microworld Physics"

Tuesday, 29 August 2023

Plenary: Recent results from LHC - Sanatorium "Westa" (09:00 - 10:30)

-Conveners: Yuri Kurochkin

time	[id] title	presenter
09:00	[1] Physics beyond the Standard Model at the LHC	SHMATOV, Sergei
09:45	[2] Probe of Standard Model in pp collisions at 13 TeV by ATLAS and CMS at LHC	KULCHITSKY, Yuri

Plenary: Invited lecture - Sanatorium "Westa" (11:00 - 11:40)

-Conveners: Victor Andreev

time	[id] title	presenter
11:00	[3] Взаимодополняемость синхротронных и нейтронных методов в исследованиях конденсированных сред	BELUSHKIN, Alexander

Plenary: Actual problems of QCD - Sanatorium "Westa" (11:40 - 13:00)

-Conveners: Victor Andreev

time	[id] title	presenter
11:40	[4] The nonperturbative QCD problems and how to resolve them	SHIMANSKIY, Stepan
12:20	[5] Адрон как когерентное состояние партонов	KUROCHKIN, Yuri

Wednesday, 30 August 2023

Plenary: Heavy ion physics - Sanatorium "Westa" (09:00 - 11:15)

-Conveners: Vladimir Kekelidze

time	[id] title	presenter
09:00	[25] Heaviest nuclei and atoms	OGANESSIAN, Yuri
09:45	[26] Super Heavy Nuclei: present and future	ITKIS, Mihail
10:30	[27] Experimental studies of light exotic nuclei far from the beta-stability line	SIDORCHUK, Sergey

Plenary: Collider physics - Sanatorium "Westa" (11:30 - 13:00)

-Conveners: Sergei Shmatov

time	[id] title	presenter
11:30	[29] Study of alpha-particle states in the fragmentation of relativistic nuclei (The BECQUEREL Project)	ZARUBIN, Pavel
12:15	[28] Physics beyond the Standard model at future lepton colliders	KISSELEV, Alexander

Plenary: Detectors at NICA - Sanatorium "Westa" (14:00 - 16:30)

-Conveners: Nikolai Russakovich

time	[id] title	presenter
14:00	[30] Вызовы проекта NICA	KEKELIDZE, Vladimir
14:45	[31] MPD TPC status	MOVCHAN, Sergey
15:15	[32] Сравнение экспериментальных и расчётных результатов контроля температурных режимов работы электроники ROC-камеры детектора TPC для эксперимента MPD	MAKAROV, Alexander
15:30	[33] The computer-aided design of cooling system for MPD detector of NICA	FEDOTOV, Alexander
16:00	[34] Status of some parts of the TPC for the MPD at the NICA facility	BAZHAZHIN, Aleksei
16:15	[35] of a GEM detector with a metallized PET membrane as a Frisch grid	ZUR, Ilya

Plenary: Detectors - Sanatorium "Westa" (17:00 - 19:00)

-Conveners: Alexander Lobko

time	[id] title	presenter
17:00	[36] Alignment of TOF700 and femtoscopy study at BM@N	PUKHAEVA, Nelli
17:20	[37] Online processing and QA of the BM@N experiment	GABDRAKHMANOV, Ilnur
17:35	[38] The Monte Carlo simulation of MiniSPD stand	BARLYKOV, Nurlan
17:50	[39] Silicon photomultipliers with deep pixels	AKBAROV, Ramil

Thursday, 31 August 2023

Plenary: Theory - Sanatorium "Westa" (09:00 - 10:30)

-Conveners: Alexander Shalyt-Margolin

time	[id] title	presenter
09:00	[41] Analytic perturbation theory: vacuum condensates from the electron-positron annihilation into hadrons data	SOLOVTSOVA, Olga
09:30	[42] Calculations of matrix elements for reactions with polarized fermions	ANDREEV, Victor
10:00	[43] Electroweak corrections to dilepton production at LHC: the Drell-Yan process vs. the Photon Fusion mechanism	ZYKUNOV, Vladimir

Plenary: Phenomenology - Sanatorium "Westa" (11:00 - 13:05)

-Conveners: Vladimir Zykunov

time	[id] title	presenter
11:00	[44] Two-particle Bose-Einstein correlations in pp-collisions at 13 TeV with ATLAS at LHC	KULCHITSKY, Yuri
11:25	[45] Study of KNO scaling in pp-collisions with ATLAS at LHC	KULCHITSKY, Yuri
11:50	[46] Double spin asymmetries in the elastic ep->ep processes in the case of parallel spins	GALYNSKII, Mikhail
12:20	[47] Exploring the possibility of studying the Drell-Yan process in the SPD (NICA) experiment	SKACHKOVA, Anna
12:50	[40] Status of the specialized station SHINE for applied research in the field of ADS systems at NICA accelerator complex	CHEKTERIKOV, Alexey

Plenary: Accelerator physics - Sanatorium "Westa" (14:00 - 16:00)

-Conveners: Mihail Itkis

time	[id] title	presenter
14:00	[48] Superradiant parametric X-ray emission: characteristics and application	FERANCHUK, Illia
14:20	[49] Polarized beams at the JINR accelerator complex	FIMUSHKIN, Victor
14:50	[50] Quality factor measurements of 325 MHz half-wave resonators in superconductive state	BYCHANOK, Dzmitry
15:20	[51] Influence of multiple scattering on electromagnetic radiation produced by relativistic electron beams	ANISHCHENKO, Sergei
15:40	[52] Стенд усилителей мощности гармонической ВЧ-станции коллайдера проекта NICA	KARPUK, Alexandr

Plenary: Cosmology - Sanatorium "Westa" (16:30 - 19:00)

-Conveners: Alexander Kisselev

time	[id] title	presenter
16:30	[53] Primary Black Holes in the Early Universe, Quantum-Gravitational Corrections and Inflationary Cosmology	SHALYT-MARGOLIN, Alexander

17:10	[54] The evolving Gravitational Background and cyclic dynamics of matter in non-expanding Universe	SERDYUKOV, Anatoly
17:50	[55] Модель скалярно-тензорной теории гравитации со скалярным полем, взаимодействующим с материей	VYBLYI, Yuri
18:30	[56] Fractal effects of the space distribution of stars in the solar neighborhood	OSTASHOVA, Mariya
18:45	[57] The mass equivalence as a consequence of special-relativistic gravity	SERDYUKOVA, Maria

Friday, 1 September 2023

Plenary: Experiment reviews - Sanatorium "Westa" (09:00 - 11:00)

-Conveners: Oleg Rogachevskiy

time	[id] title	presenter
09:00	[58] Portals to dark matter and search perspectives at the LHC	SAVINA, Maria
09:45	[59] Search for Light Dark Matter in the experiment NA64 at the CERN SPS	KIRSANOV, Mikhail
10:30	[60] Collaboration FLAP. Investigations with electron beams of LINAC200 (JINR)	BLEKO, Vitold

Plenary: Theory - Sanatorium "Westa" (11:20 - 13:00)

-Conveners: Yuri Kulchitsky

time	[id] title	presenter
11:20	[62] Solution of the Schrödinger equation in the two Coulomb centers problem in the two-dimensions Lobachevsky space	BARAN, Alexander
11:40	[64] Approximate analytical solutions of the quasipotential equations with confining potentials	GRISHECHKIN, Yury
12:00	[65] Threshold S-factor and Leptonic Decay Widths for a Composite System of Two Arbitrary-Mass Relativistic Spinor Quarks	CHERNICHENKO, Yuriy
12:20	[66] Сингулярные решения свободного уравнения Шредингера	ROBUK, Victor
12:40	[84] Electromagnetic interactions of the deuteron at low and medium energies	NEVMERZHITSKY, Maxim

Plenary: Theory and phenomenology - Sanatorium "Westa" (14:00 - 16:10)

-Conveners: Elena Kokoulina

time	[id] title	presenter
14:00	[67] Large relative phase induced by charmonium in baryon-antibaryon production in electron-positron annihilation	Dr BYSTRITSKIY, Yury
14:20	[68] Rare semileptonic $B^+ \rightarrow \pi^+ l^+ l^-$ decay in the Standard Model	PARKHOMENKO, Alexander
14:50	[69] Positively charged pions and kaons production in argon-nucleus collisions at 3.2 GeV/n in the BM@N experiment at the Nuclotron	PLOTNIKOV, Vasilii
15:20	[70] π^0 , η , η' -meson to photon transition form-factor in the relativistic quark model	HAURYSH, Vadzim
15:35	[71] The role of pseudovector mesons in low-energy hadron physics	AVAKYAN, Sergey
15:50	[72] Rare meson decays	AVAKYAN, Elena

Plenary: Phenomenology - Sanatorium "Westa" (16:40 - 19:00)

-Conveners: Yurii Kurochkin

time	[id] title	presenter
16:40	[73] Exact and leading order radiative effects in polarized SIDIS	ILYICHEV, Alexander
17:00	[74] High-precision simulation of polarization effects for processes on modern colliders using the Monte-Carlo event generator ReneSANCe	YERMOLCHYK, Vitaly

17:20	[75] Study of LFV processes with CMS at LHC	MAKARENKO, Vladimir
17:40	[76] Поляризационные эффекты в процессах парного рождения мюонов	SHALAEV, Vladislav
17:55	[77] Jet flavour discrimination and measurement of gluon jet fractions at LHC	BUDKOUSKI, Dzmitry
18:10	[78] Search for dark matter produced in association with a leptonically decaying Z boson with the CMS Experiment at the LHC	SLIZHEVSKIY, Kirill
18:25	[79] Studying muon pair production based on open data from CMS	KORSAKOV, Iurii

Saturday, 2 September 2023

Plenary: Theory - Sanatorium "Westa" (09:00 - 10:45)

time	[id] title	presenter
09:00	[80] Phenomenology of high multiplicity	Prof. KOKOULINA, Elena
09:30	[81] Manifestation of dark matter axions in relativistic dynamics of particle spins	SILENKO, Alexander
10:00	[82] Multiparticle production in ϕ^4 theory: method of singular solutions and numerical results	FARKHTDINOV, Bulat
10:15	[83] Relaxation timescales in the dynamics of quantum Ising spin chains	IZOTOVA, Ekaterina
10:30	[85] Associated production of Υ plus D in the improved color evaporation model	CHERNYSHEV, Alexey

Plenary: Phenomenology - Sanatorium "Westa" (11:15 - 12:15)

time	[id] title	presenter
11:15	[86] Limits of CP-conserving Trilinear Gauge Boson vertices in $pp \rightarrow WW$ at CMS LHC	ANDREEV, Victor
11:30	[87] Two-photon production WW pair at the LHC	Mr MANKO, Andrei
11:45	[88] Model-independent constraints on the coupling constants of the Z' boson with radiation corrections	KURILENKA, Valery
12:00	[89] Model-independent constraints on Z' -boson coupling constants with longitudinally polarised initial beams	SINEGRIBOV, Dmitriy

Plenary: Selected topics - Sanatorium "Westa" (12:15 - 13:10)

time	[id] title	presenter
12:15	[90] Dielectric laser acceleration: concept, achievements, challenges, and possible applications	LOBKO, Alexander
12:40	[91] Future of Nuclear Knowledge in Belarus and Nuclear Knowledge for Future	SYTOVA, Svetlana
13:00	[92] Closing remarks	