# LXXI International conference "NUCLEUS – 2021. Nuclear physics and elementary particle physics. Nuclear physics technologies"

# Tuesday, 21 September 2021

## Section 3. Modern nuclear physics methods and technologies (13:50 - 18:00)

-Conveners: Vladimir Zherebchevsky

time	[id] title	presenter
13:50	[306] New technologies for the vertex detectors at the NICA collider experiments	Dr ZHEREBCHEVSKY, Vladimir
14:15	[62] Simulation of ToF performance of ECal MPD/NICA	Dr V.V. KULIKOV
14:40	[174] Luminosity determination with ALICE at the LHC	FURS, Artur
15:05	Coffee break	
15:50	[354] Study of performance of Fast Beam-Beam Collision monitor system with MC simulations and machine learning methods	SANDUL, Vladislav
16:15	[247] Implementation of high-performance computing technologies in the BmnRoot framework	NEMNYUGIN, Sergei
16:40	[270] Neural network application to event-wise estimates of the impact parameter	GALAKTIONOV, Kirill
17:05	[258] Efficiency study of the ECal detector of the HADES experiment	SHABANOV, Arseniy
17:30	End of session	

# Section 3. Modern nuclear physics methods and technologies (13:30 - 18:00)

### -Conveners: Dmitrii Nesterov

time	[id] title	presenter
13:30	[290] New mechanic and cooling systems for the silicone detectors used in high energy physics experiments	NESTEROV, Dmitrii
13:55	[59] Complex estimation of the proportional chamber cathode surface condition after work at Large Hadron Collider experiment	Dr GAVRILOV, Gennadii Prof. BUZOVERYA, Marina
14:20	[79] □Analyzing power in quasi-elastic proton-proton scattering at the beam energies of 200-650 MeV/nucleon	VOLKOV, Ivan
14:45	[252] Proton polarimeter for the experiments at the Nuclotron	TEREKHIN, Arkadii
15:10	Coffee break	
15:30	[53] Towards MAPS based Inner Tracking System of NICA MPD.	CEBALLOS SANCHEZ, Cesar
15:55	[251] Particle identification methods in the BM@N experiment	MASHITSIN, Konstantin
16:20	[81] Calibration and performances of the electromagnetic calorimeter at MPD/NICA.	Mr MARTEMIANOV, M. A.
16:45	[184] Scintillation detector prototypes for Beam-beam counter at NICA SPD	Mr TISHEVSKY, Aleksey
17:10	[39] Cathode strip chambers for the outer tracker of the BM@N experiment	KATTABEKOV, Rasuljon
17:35	[146] READOUT ELECTRONICS OF THE SILICON TRACKING SYSTEM OF THE BM@N EXPERIMENT AT NICA	SHITENKOV, Mikhail

## Section 3. Modern nuclear physics methods and technologies (13:00 - 17:00)

-Conveners: Vitalii Petrov

time	[id] title	presenter
13:00	[78] Directional sensitivity investigation of two coordinate neutron detector based on \$^{10}\$B layer and wire chamber	POTASHEV, Stanislav
13:25	[332] ELIGANT 3He long neutron counter for (a, xn) and (a, xp) reaction studies	TESTOV, Dmitry
13:50	[367] BACKGROUND SUPPRESSION IN THE MEASUREMENT OF REACTIONS USING THE NEUTRON TAGGING TECHNIQUE ON THE NG-150 NEUTRON GENERATOR	BAKHRANOV, O.O.
14:15	[268] CLUSTER of PHOSWICH y-DETECTORS for "MULTI" FACILITY	SOBOLEV, Yuri
14:40	Coffee break	
14:55	[297] Background reduction in pulsed gamma beam experiments using segmented Germanium detectors	ZHU, Fan Mr VASILE, Andrei
15:20	[26] The Penning trap with the combined functions of purification and measuremen	BEZRODNOVA, Olesia
15:45	[205] IDREAM detector at Kalinin NPP: status and prospects	KONSTANTINOV, Andy
16:10	[162] OSIRIS – An online scintillator radiopurity monitoring pre-detector of JUNO	LIU, Runxuan
16:35	[86] WHY DO WE NEED the FORMULA for the ENERGY RESOLUTION of a SCINTILLATION SPECTROMETER with SEVERAL PHOTODETECTORS?	SAMEDOV, Victor

# Section 3. Modern nuclear physics methods and technologies (14:00 - 19:15)

-Conveners: Tatiana Lazareva

time	[id] title	presenter
14:00	[369] NEUTRON-PHYSICAL CHARACTERISTICS ESTIMATION OF THE SUBCRITICAL ASSEMBLY "YALINA-THERMAL" WITHIN THE PHYSICAL BIRTH-AND-DEATH MODEL	ZUBAREVA, Maria
14:25	[183] NEUTRON FLUX ESTIMATION IN THE SPALATION EXPERIMENT AT THE PNPI SYNCHROTRON	ERSHOV, Konstantin
14:50	[50] CARBON NANOMATERIALS APPLICATION FOR ISOL-METHOD OF HEAVY ION FUSION REACTION PRODUCTS	Mr VEDENEEV, Viacheslav
15:15	[122] Method for recording low-energy transitions that occur during the decay of superheavy elements in the focal plane of a magnetic spectrometer (MAVR)	SHAKHOV, Aleksei
15:40	[182] Fast and thermal neutron scattering and absorption by structural materials of neutron detectors	Dr KARAEVSKY, Sergey
16:05	Coffee break	
16:20	[142] Capabilities of Probe Emission Mössbauer Spectroscopy for Studies on Post-effects of Critical Radiation Exposure in Tantalum	ALEKSEEV, Igor
16:45	[245] Study of fallouts in the bottom sediments of Chernobyl Nuclear Power Plant cooling pond	ZHELTONOZHSKAYA, Marina
17:10	[185] THE USE OF THE PSA METHOD IN THE INTERPRETATION OF THE BEHAVIOR OF CURVES ON THE \$\Delta\$E-E DIAGRAMS FOR TELESCOPE OF THE Si - DETECTORS.	MORDOVSKOY, Michael
17:35	[313] Geant4 study for geometry of quartz fiber luminometer at CMS HL-LHC	SUNAR CERCI, Deniz
18:00	[364] CATALYSTS OF RADIO-CHEMICAL REACTIONS, CONNECTION WITH THE CONCEPTS OF THE ORIGIN OF PETROLEUM ON EARTH	ISMAYILOVA, M.K.
18:25	[363] THE STUDY OF NUCLEUS REACTIONS IN GUNESHLI PETROLEUM BY EPR METHOD	ISMAYILOVA, M.K.