

Program of DUBNA-SPIN-23(02.09)

	4.09 Mo		
	Chairman:		
10.00	OPENING		
10.10	Kim Victor	NRC KI - PNPI, Gatchina & SPbPU, St. Petersburg	Physics with SPD experiment at NICA
10.50	Zelenski Anatoli	MIPT, Moscow,	Polarized Ion sources for high-energy accelerators and colliders
11.30	<i>Coffee Break</i>		
	Chairman Kim V.		
11.50	Teryaev Oleg	JINR, Dubna	Brief history of effective time-reversal in QCD
12.30	Kouznetsov Oleg	JINR, Dubna	Studies of the nucleons structure using the SIDIS azimuthal angle asymmetries calculated with modified double ratios of numbers of the hadrons
12.50	Neznamov Vasilij	Russian Fed Nucl Center, Sarov	Quantum model of spinning black holes. Quantum model of electron.
13.30	Lunch		
	Chairman: Goloskokov S.		
15.00	Datta Amaresh	JINR, Dubna	Prospects of Open-Charm Asymmetry Measurements at the SPD
15.30	Terekhin Arkadiy	JINR, Dubna	Simulation of the pp - scattering for the Beam-Beam Counter at SPD at NICA
16.00	<i>Break</i>		
	Chairman: Anikin I.		
16.10	Kurbatov Vladimir	JINR, Dubna	Resolution of SPD Detector in the search of Dibarions with small energy excitation
16.40	Tishevsky Aleksey	JINR, Dubna	Development of the SPD Beam-Beam Counter scintillation detector prototype with FERS 5200 front-end readout system.
17.10	Kolokolchikov Sergey	INR RAS, Moscow	Transition energy crossing of polarized proton beam at NICA
17.40	Kostenko Boris	JINR, Dubna	Fast simulation of nucleon momenta in deuteron for experiments at NICA SPD
18.10	Kokoulina Elena	JINR, Dubna	Active role of gluons in multiparticle production
19.00	Welcome Party		

	5.09 Tu		
	Chairman:		
9.30	Y.Semertzidis (ZOOM)	CAPP/IBS Daejeon	Status and physics reach of the proton EDM experiment
10.10	Nikolaev Nikolai	Landau Inst Theor. Phys, Chernogolovka	Search for axions at NICA
10.50	Yuri Obukhov	Nucl. Safety, Inst. RAS, Moscow	Probing axion physics with spin
11.20	Silenko Alexander	JINR,Dubna	Manifestation of dark matter axions in spin experiments
11.50	Coffee Break		
	Chairman:		
12.10	Neznamov Vasiliy	Russian Fed Nucl Center, Sarov	Quantum electrodynamics with empty fermion vacuum without “sea” of states with negative energies and with opposite signs of mass summands in Dirac equations for particles and antiparticles. Possibilities of experimental verification.
12.40	Shabaev Vladimir	St. Petersburg SU, PNPI	How to access QED at a supercritical Coulomb field with heavy ions
13.10	Sedov Sergei	RFNC, Sarov	Analog of Weyl meson as analog of the dark photon
13.30	Lunch		
	Chairman:		
15.00	Kotikov Anatoly	JINR, Dubna	Bjorken sum rule with analytic coupling at low Q^2 values
15.30	Kataev Andrei	INR RAS Moscow	The CBK-relation and the β -expanded representations for the Bjorken polarized sum rule
16.00	Ermolaev Boris	Toffe PTI, St Petersburg	On the recent polemics on Structure Function g_1 at small x
16.30	Coffee Break		
	Chairman:		
16.50	Zhevlakov Alexey	JINR, Dubna	T-odd angular coefficients for Drell-Yan process with Z neutral boson
17.20	Solovtsova Olga	JINR&GSTU	Spin effects in the Sommerfeld-Gamow-Sakharov factor
17.50	Pak Dmitriy	PTI, Academy of Sciences, Lab.of Theor. Phys., Tashkent	Weyl group symmetry as an intrinsic color symmetry of QCD
18.20	Abramov Victor	NRC Kurchatov Institute - IHEP Protvino	Polarization of hyperons produced by meson beams
18.50	Olga Bakina	JINR, Dubna	Study of charmonia production in e^+e^- annihilation at center-of-mass energies above 3.81 GeV

PARALLEL SECTION 5.09 TU

	Chairman		
15.00	Volkov Ivan	JINR, Dubna	Vector Polarization Of The Nuclotron Deuteron Beam At The Energies From 200 To 650 Mev/Nucleon
15.20	Rozhdestvenskij Anton	PNPI, Gatchina	Project On Research Of Nuclear Dd-Synthesis With Polarisation Of Initial Particles At Low Energies (Polfusion)
15.40	Selyugin Oleg	JINR, Dubna	Relative contributions of cross-even and cross-odd parts to the spin dependent elastic hadron scattering amplitudes at high energies
16.00			
16.30	Coffee Break		
	Chairman		
16.50	Shindin Roman	JINR, Dubna	Bessel functions to fermion quantization
17.10	Pestov Ivanhoe	JINR, Dubna	General Covariant Dirac Equation
17.30	Parvan Alexandru	JINR and IFIN-HH	Transverse momentum distributions of hadrons in the Tsallis-3 statistics
17.50	Punetha Garima (zoom)	Soban Singh Jeena University Almora	Dual QCD thermodynamics at finite temperature and chemical potential
18.10	Lebedev S. L. (zoom)	Surgut State University	Spin Radiative Corrections to the Radiation Probability and Power in Classical and Quantum Electrodynamics
18.30	Makhaldiani Nugzar	JINR, Dubna	Statistical potentials, AdS/CFT correspondence and (higher-)spin effects in heavy ion collisions
18.50	Machavariani Alexander	JINR, Dubna	Determination of location of the spin quantization axis of the vector meson-resonance V via the cross sections of the reactions

6.09 We			
Chairman:			
9.30	Aksentev Alexander	INR RAS, Moscow	Spin-flipping within the Frequency Domain method of searching for particle electric dipole moment
9.55	Senichev Yury	INR, RAS, Moscow	NICA facilities for the search for EDM light nuclei
10.20	Melnikov Aleksei	INR RAS, Moscow	Quasi-frozen spin concept at NICA for EDM search and its matrix analysis
10.45	Obraztsov Ivan	BINP, Novosibirsk	Manifestation of the electric dipole moment in the decays of τ leptons produced in $e+e^-$ annihilation
11.10	Ginzburg Ilya (zoom)	IM, Novosibirsk	Scattering of unstable particles
11.40	Coffee Break		
Chairman:			
12.00	Xie Ya-Ping (zoom)	IMP, Lanzhou	Extraction of information on transversity GPDs from π^0 and eta production on EIC of China
12.30	Selyugin Oleg	JINR,Dubna	GPDs and gravitation form factors
13.00	Manaenkov Sergey	PNPI, Gatchina	Phenomenology of Vector-meson Electroproduction on Spinless Targets
13.30	Lunch		
Chairman:			
15.00	Gao Jian-Hua (zoom)	Shandong University, Weihai	Revisit the spin effects by thermal vorticity
15.30	Zakharov Valentin	ITEP, JINR	Axial current and hydro-gravity duality
16.10	Prokhorov Georgy	JINR,Dubna	Kinematical Vortical Effect and Gravitational chiral anomaly
16.30	Coffee Break		
Chairman:			
16.50	Braguta Victor	JINR, Dubna	Influence of relativistic rotation on QCD properties
17.30	Roenko Artem	JINR, Dubna	Inhomogeneous phases in rotating gluon plasma
17.50	Kolomoyets Natalia	JINR,Dubna	Correlations of kinematic quantities for pions and nucleons in PHSD model
18.10	Alpatov Egor (zoom)	NRNU MEPhI	Global polarization of Xi hyperons in Au+Au collisions in the STAR experiment
19.00	Conference dinner		

7.09 Th			
Chairman:			
9.30	Saleev Vladimir	NRU, Samara	Z-boson spectrum and lepton angular coefficients in the LO high-energy factorization with the real NLO corrections
10.10	Shilyaev Kirill	NRU, Samara	Production of prompt polarized J/psi in the NRQCD and Generalized Parton Model
10.30	Shimanskiy Stepan	JINR, Dubna	Exclusive reactions and Spin problems at SPD
11.00	Ivanov Mikhail	JINR, Dubna	Weak decays of heavy baryons
11.30	Coffee Break		
Chairman:			
11.50	Anikin Igor	JINR, Dubna	Effective Potential and Conformal Symmetry in ϕ^4
12.20	Burinskii Alexander	Nucl. Safety, Inst. RAS, Moscow	Modified Spinning Black Hole as a Nonperturbative Electron Model
12.50	Chernitskii Alexander (zoom)	State Chem. Pharm. Uni. St. Petersburg	About toroidal leptons in space-time film theory
13.20	Lunch		
Chairman:			
15.00	Uzikov Yury	JINR, Dubna	Double polarized p-3He and d-3He scattering and test of T-invariance
15.30	Tokarev Mikhail	JINR, Dubna	Search for new symmetries of hadron production in high energy collisions of protons and nuclei
16.00	Dvornikov Maxim	JINR, Dubna, IZMIRAN	Spin effects in the neutrino gravitational scattering
16.30	Coffee Break		
Chairman:			
16.50	J.-C.Peng (Zoom)	University of Illinois at Urbana-Champaign	Evolution of Helicity Property of Relic Neutrinos
17.30	Semushin Artur (zoom)	NRU MEPHI and A. Alikhanyan Nat.Sci. Lab	Composite effective field theory signal in case of searching for neutral triple gauge couplings with $\gamma\gamma\gamma \rightarrow e^+ e^- \bar{\nu} \nu$ production
18.00	Kolomeitsev Evgeni (zoom)	JINR, Dubna MBU Banska Bystrica	Hyperon polarization in HICs and in hadronic reactions
18.30	Nazarova Elizaveta (zoom)	JINR, Dubna	Performance of hyperon global polarization measurements with NICA/MPD
19.30	Concert		

8.09 Fr			
	Chairman:		
9.30	Mochalov Vasilii	IHEP,Protvino	Study of Spin Effects in SPASCHARM Experiment at U-70 facility
10.10	Nurusheva Marina (zoom)	MEPhI ,Moscow	Feasibility of model-independent reconstruction of the amplitudes of the pp elastic scattering matrix at the SPASCHARM facility at U70
10.40	Shulga Sergey	JINR, Dubna	Measurement of quark and gluon jet fractions: methodology and preliminary results for the CMS
11.00	Yudin Ivan	JINR, Dubna	Decay Of High-Spin Isomers Into Odd-Odd Holmium Nuclei With A= 160,158,156.
11.30	Coffee Break		
	Chairman:		
11.50	Filatov Yury	MIPT, Moscow	Preservation of the proton polarization up to 13.5 GeV/c in the Nuclotron at JINR using partial snakes based on dynamic solenoids
12.20	Zelenski Anatoli	MIPT, Moscow	Proton Polarimetry in energy range from keV to 255 GeV. ³ He -absolute Polarimetry at 6 Mev
12.50	Piskunov Nikolay	JINR, Dubna	Beam polarimetry in the NICA collider using a proton cluster target.
13.30	Lunch		
	Chairman:		
15.00	Sadykov Renat	JINR,Dubna	Photon-photon collisions with arbitrary polarization in ReneSANCe Monte Carlo generator
15.20	Yermolchik Vitaly	JINR,Dubna	Electroweak radiative corrections to polarized top quark pair production
15.35	Dydyshka Yahor	JINR,Dubna	One-loop electroweak radiative corrections to polarized $e^+e^- \rightarrow ZZ$ process
15.50	Rumyantsev Leonid (zoom)	JINR,Dubna	SANC: process $\gamma + \gamma \rightarrow Z + H$ at one-loop level including polarization effects
16.10	Zygunov Vladimir	JINR,Dubna	Electroweak corrections to dilepton production at LHC: the Drell-Yan, the photon fusion, and the inverse photon emission
16.30	Galynskii Mikhail (zoom)	JIPNR, Minsk	Double spin asymmetries in the elastic scattering of electrons on a polarized proton in the case of parallel spins.
16.50	Closing		

Spintronics and physics of nanostructures (satellite Workshop to DSPIN-2023)
September 8, 2023
National Research Nuclear University MEPhI, Kashirskoe Shosse 31, Moscow
Contacts: 8-906-066-92-48; KPKatin@yandex.ru (Konstantin Katin)

JINR, Dubna

Part 1. Chairman: V. Melezhik

11.50: Kochetov Evgenii; JINR, Dubna

Proposal for realizing Majorana fermions in strongly correlated nanowires

12.30: Kesharpu, Kaushal Kumar, JINR, Dubna

Flipping chiral edge states through nuclear spin S and spin modulating vector in topological insulators

13.00: Maksimov Pavel, JINR, Dubna

Frustrated magnetism and quantum computing

13.30-15.00: LUNCH

Part 2. Chairman: E. Kochetov

15.00: Kondratyev Vladimir, JINR, Dubna

Tunnel spin current in superferromagnets

15.30: Melezhik Vladimir, JINR, Dubna

Simulation of spin effects with ultracold gases in optical traps

16.00: Yushankhai Victor (zoom), JINR, Dubna

Lattice models of quantum magnetism with strong spin-orbit interaction:
ab initio cluster calculations

MEPhI, Moscow

Part 3. Chairmans: N. Kargin and K. Katin

17.00: Klochkov Alexey N., Yskakov A., Vinichenko A.N., Safonov D.A., Bulavin M.V.,

Galushko A.V., Vasil'evskii I.S., National Research Nuclear University MEPhI, Moscow
Effect of neutron irradiation on the optical and electrical properties of the doped AlGaAs/GaAs quantum wells

17.15: Grekova Anastasiya A., Maslov M.M., Katin K.P., National Research Nuclear University MEPhI, Moscow

The electronic and optical properties of AA and AB diamanes, deposited on metal and dielectric substrates

17.25: Kuliamin Pavel A., National Research Nuclear University MEPhI, Moscow

Investigation of the influence of mechanical deformations on the dielectric band gap and optical characteristics of graphene on a molybdenum ditelluride substrate

17.35: Merinov Valeriy B., National Research Nuclear University MEPhI, Moscow

All-nitrogen High Energy Density Materials and their electronic and energy characteristics

17.45: Bauetdinov Yusupbek, National Research Nuclear University MEPhI, Moscow

Thermal stability of novel carbon material, hexatetracarbon

Poster: Veselova Svetlana V.^{1,2}, Maritrosyan I.A.^{1,2}, Malyavina A.Y.¹, Batulin R.G.², Rudnev I.A.^{1,2}, Pokrovskii S.V.^{1,2}

¹National Research Nuclear University "MEPhI", Moscow, Russia

²Kazan (Volga Region) Federal University, Kazan, Russia

Dependence of the critical current of HTS tapes in different magnetic field orientations