Institute for Nuclear Research
of the Russian Academy of Sciences

Joint Institute for Nuclear Research

QUARKS-2018

20th International Seminar on High Energy Physics
Valday, Russia, May 27 — June 2, 2018.

Preliminary program

Moscow, 2018

Sunday, May 27

Afternoon: Registration

Plenary Session. 18:00

1. *Opening.*

2. Sergey Sibiryakov (EPFL, Lausanne & CERN & INR RAS)
   Ultra-light scalar dark matter: Motivation, Dynamics, Probes. — *30 min.*

3. Alexander Zakharov (ITEP, Moscow & BLTP JINR, Dubna)
   Constraints on alternative theories of gravity with observations of the Galactic Center. — *30 min.*

4. Shinji Mukohyama (Yukawa Inst., Kyoto U.)
   Horava-Lifshitz cosmology revisited. — *30 min.*

5. Eugeny Babichev (LPT Orsay)
   Scalar-tensor theories after GW170817. — *30 min.*

Monday, May 28

Plenary Session. 10:00

1. Alexander Studenikin (Moscow State U.)
   Overview on electromagnetic properties of neutrino. — *30 min.*

2. Nikolay Krasnikov (INR RAS, Moscow)
   Search for light dark matter at accelerators. NA64 experiment. — *30 min.*

3. Alexander Nozik (INR RAS, Moscow)
   Status and perspectives of the Troitsk nu-mass experiment. — *30 min.*

Coffee Break. 11:30 – 11:50

4. Zhan-Arys Dzhilkibaev (INR RAS, Moscow)
   Baikal-GVD project: current status and prospects. — *30 min.*

5. Dmitry Zaborov (CPPM, Marseille)
   KM3NeT: Neutrino oscillation and astroparticle research in the Mediterranean sea. — *30 min.*

6. Rodion Burenin (IKI RAS, Moscow)
   Current cosmological constraints on linear perturbations amplitude, neutrino mass and number of relativistic species . — *30 min.*

Parallel Section #1 (Hall #1). 15:00

1. Andrei Smilga (Nantes U.)
   Classical and quantum dynamics of higher-derivative theories. — *30 min.*

2. Masahide Yamaguchi (Tokyo Inst. of Technology)
   Ghost-Free Theory with Third-Order Time Derivatives. — *30 min.*

3. Mikhail Volkov (U. of Tours IDP)
   Massive spin-2 field in arbitrary spacetimes – the detailed derivation. — *30 min.*

4. Stanislav Alexeyev (Sternberg Astronomical Inst., Moscow)
   Constraints on Extended Gravity at Galaxy Clusters Scales. — *30 min.*

Coffee Break. 17:00 – 17:30

5. Sergey Sushkov (Inst. of Physics, Kazan Federal U.)
   Cosmological perturbations during the kinetic inflation in the Horndeski theory. — *30 min.*

6. Emil Akhmedov (MIPT & ITEP, Moscow)
   Ultraviolet phenomena in AdS self-interacting quantum field theory. — *30 min.*

7. Victoria Volkova (INR RAS, Moscow)
   Cosmological bounce in Horndeski theory and beyond. — *20 min.*

8. Evgeny Kholupenko (Ioffe Inst., St.Petersburg)
   The Possible Lost Anisotropy of the Unruh radiation. — *30 min.*

Parallel Section #2 (Hall #2). 15:00

1. Alexei Yung (PNPI & St.Petersburg State U.)
   Non-Abelian vortex in four dimensions as a critical superstring. — *30 min.*

2. Evgenii Ievlev (St.Petersburg State U.)
   Non-Abelian strings in $N = 1$ supersymmetric QCD. — *30 min.*

3. Joseph Minahan (Uppsala U.)
   Mass deformed super Yang-Mills on spheres. — *30 min.*

4. Fedor Levkovich-Maslyuk (Ecole Normale Superieure, Paris)
   Quantum spectral curve and structure constants in $N = 4$ super Yang-Mills. — *30 min.*

Coffee Break. 17:00 – 17:30

5. Dmitri Kazakov (JINR, Dubna)
   The Structure of UV Divergences in Maximally Supersymmetric Gauge Theories. — *30 min.*

6. Konstantin Stepanyantz (Moscow State U.)
   Supersymmetry, quantum corrections, and the higher derivative regularization. — *30 min.*

7. Lubomir Martinovic (Inst. of Physics SAS, Bratislava & BLTP JINR, Dubna)
   Non-vanishing of vacuum diagrams in light-cone perturbation theory. — *30 min.*

8. Valeria Akhmedova (HSE, Moscow)
   Reductions of the dispersionless DKP hierarchy. — *20 min.*

Parallel Section #3 (Hall #3). 15:00

1. Peter Lukin (Budker Inst. & Novosibirsk State U.)
   Measurements of the $e^+e^- \to$ hadrons cross sections with the CMD-3 detector at VEPP-2000 collider. — *30 min.*

2. Marat Khabibullin (INR RAS, Moscow)
   Recent results from the T2K experiment. — *30 min.*

3. Oleg Samoylov (JINR, Dubna)
   A review on latest NOvA results. — *30 min.*

4. Ksenia Ptitsyna (INR RAS, Moscow)
   Cosmic rays in Galaxy. — *30 min.*

Coffee Break. 17:00 – 17:30

5. Denis Shlenev (Yaroslavl Higher Military School of Air Defense)
   Photon splitting in strongly magnetized medium with taking into account positronium influence. — *20 min.*

6. Igor Krasnov (INR RAS, Moscow)
   Numerical estimate of minimal active-sterile neutrino mixing for sterile neutrinos at GeV scale. — *20 min.*

7. Andrey Lobanov (Moscow State U.)
   Quantum field-theoretical description of neutrino behavior in dense matter. — *20 min.*

8. Aleksandra Chukhnova (Moscow State U.)
   Stationary and non-stationary solutions of the evolution equation for neutrino in matter. — *30 min.*

Parallel Section #4 (Hall #4). 15:00

1. Evgeny Zabrodin (Oslo U.)
   Relaxation to local equilibrium in relativistic heavy ion collisions. — *30 min.*

2. Boris Kerbikov (ITEP, Moscow)
   Sound in quark matter. — *30 min.*

3. Tamaz Khunjua (Moscow State U.)
   Dense quark matter with chiral imbalance: NJL-model consideration. — *30 min.*

4. Roman Zhokhov (IHEP Protvino)
   Charged pion condensation in dense quark matter with isospin and chiral imbalance. — *30 min.*

Coffee Break. 17:00 – 17:30

5. Aleksandr Iakubovich (St.Petersburg State U.)
   QCD motivated meson models with a chiral imbalance. — *30 min.*

6. Alyona Putilova (St.Petersburg State U.)
   Exotic meson decays and polarization asymmetry in hadron environment with a chiral imbalance. — *30 min.*

7. Ivan Sobolev (DESY & Moscow State U.)
   Corrections to the Higgs mass in the MSSM: resummation of bottom quarks contributions. — *20 min.*

Tuesday, May 29

Plenary Session. 10:00

1. Mikhail Kirsanov (CERN)
   Search for Dark Matter in CMS at the LHC. — *30 min.*

2. Evgenii Baldin (Budker Inst., Novosibirsk)
   ATLAS status & overview. — *30 min.*

3. Kirill Chilikin (Lebedev Inst. RAS, Moscow)
   Overview of Belle results. — *30 min.*

Coffee Break. 11:30 – 11:50

4. Nikita Beliy (U. of Chinese Academy of Sciences)
   Tests of Lepton-flavour universality and related anomalies at LHCb. — *30 min.*

5. Eduard Boos (Skobeltsyn Inst., Moscow State U.)
   Progress in Top Quark Physics. — *30 min.*

6. Yury Kudenko (INR RAS, Moscow)
   Study of oscillations with accelerator and reactor neutrinos. — *30 min.*

Parallel Section #1 (Hall #1). 15:00

1. Alexander Vikman (Inst. of Physics, Prague)
   Superconducting Dark Matter. — *30 min.*

2. Michel Tytgat (Universite Libre de Bruxelles)
   Clockwork Dark Matter. — *30 min.*

3. Kenichi Saikawa (Max-Planck-Institute for Physics)
   Axion dark matter and cosmology. — *30 min.*

4. Anton Chudaykin (INR RAS, Moscow)
   Light scalar field dark matter with O(1) keV sterile neutrino. — *30 min.*

Coffee Break. 17:00 – 17:30

5. Igor Tkachev (INR RAS, Moscow)
Phenomenology of axion miniclusters. — *30 min.*

6. Dmitry Levkov (INR RAS, Moscow)
Gravitational Bose condensation of dark matter axions. — *30 min.*

7. Alexander Panin (INR RAS, Moscow)
Laser effect for cosmic axions. — *30 min.*

8. Mikhail Kirsanov (CERN)
Search for a new X boson and Dark Photons in NA64 at the CERN SPS. — *20 min.*

9. Victor Romanenko (KBSU)
Axion search and neutron dipole moment in cryogenic experiments with quantum data receiver. — *20 min.*

Parallel Section #2 (Hall #2). 15:00

1. Oleg Zaslavskii (Karazin Kharkov National U., Ukraine)
Ultra-high energy particle collisions in strong gravitational field and super-Penrose process. — *30 min.*

2. Maxim Fitkevich (INR RAS & MIPT, Moscow)
Failure of mean field approximation in weakly-coupled dilaton gravity. — *20 min.*

3. Valery Marachevsky (St.Petersburg State U.)
Casimir repulsion and attraction due to presence of Chern-Simons layers at the surfaces of dielectrics and metals. — *30 min.*

4. Yuki Amari (Tokyo U. of Science)
Solitons in the $SU(3)$ Faddeev-Niemi model. — *30 min.*

Coffee Break. 17:00 – 17:30

5. Maxim Kurkov (U. of Naples "Federico II")
Parity anomaly in four dimensions. — *30 min.*

6. Oleksandr Diatlyk (HSE, Moscow)
Massive quantum scalar field in presence of moving mirror. — *20 min.*

7. Oleg Novikov (St.Petersburg State U.)
   Inhomogeneous perturbations in the pseudo-Hermitian quantum cosmology. — *20 min.*

8. Boris Latosh (Dubna U.)
   Three Waves for Quantum Gravity. — *20 min.*

Parallel Section #3 (Hall #3). 15:00

1. Pavel Kovtun (Victoria U.)
   Relativistic thermodynamics and magneto-hydrodynamics. — *30 min.*

2. Maxim Dvornikov (IZMIRAN, Troitsk)
   Electric current of massive fermions induced by a magnetic field in the equilibrium. — *30 min.*

3. Roman Nevzorov (ITEP, Moscow)
   Generation of Baryon Asymmetry in the E6 inspired composite Higgs model. — *30 min.*

4. Mikhail Dolgopolov (Samara U.)
   Critical temperatures in extensions of Higgs sector. — *30 min.*

Coffee Break. 17:00 – 17:30

5. Petr Satunin (INR RAS, Moscow)
   One-loop corrections to photon velocity in Lorentz-violating QED. — *30 min.*

6. Konstantin Astapov (INR RAS, Moscow)
   On photon splitting in Lorentz-violating QED. — *20 min.*

7. Aleksandr Ivanov (St.Petersburg State U.)
   The asymptotic approach to renormalization of the Yang-Mills theory. — *20 min.*

8. Natalia Kharuk (St.Petersburg State U.)
   Modifying the theory of gravity by changing independent variables. — *20 min.*

9. Vjacheslav Prokopov (Moscow State U.)
   Black hole shadow in tidal charge extended models. — *20 min.*

Parallel Section #4 (Hall #4). 15:00

1. Irina Aref'eva (Steklov Math. Inst., Moscow)
   Holography for Heavy Ions Collisions at LHC and NICA. — *30 min.*

2. Alexander Gorsky (IITP, Moscow)
   Metal or insulator?Dirac operator spectrum in holographic QCD. — *30 min.*

3. Vladimir Vechernin (St.Petersburg State U.)
   Short- and long-range rapidity correlations in the model with a lattice in transverse plane. — *30 min.*

4. Dmitry Ageev (Steklov Math. Inst., Moscow)
   Holographic local quench: quantum complexity and entanglement. — *30 min.*

Coffee Break. 17:00 – 17:30

5. Anastasia Golubtsova (BLTP JINR, Dubna)
   Holographic RG flow at zero and finite temperatures. — *20 min.*

6. Pavel Slepov (Moscow State U.)
   Holographic study of Wilson loop in the anisotropic background with confinement /deconfinement phase transition. — *20 min.*

7. Mikhail Khramtsov (Steklov Math. Inst., Moscow)
   1/N diagrammatics in SYK model beyond the conformal limit . — *20 min.*

8. Maria Tikhanovskaya (Steklov Math. Inst., Moscow)
   New large N solutions of the SYK model. — *20 min.*

9. Kristina Rannu (RUDN, Moscow)
   Holographic anisotropic background with confinement-deconfinement phase transition. — *20 min.*

Wednesday, May 30

Excursion

Parallel Section #1 (Hall #1). 15:00

1. Alexei Starobinsky (Landau Inst. RAS, Moscow)
   Inflation and pre-inflation in R^2 and related gravity models. — *30 min.*

2. Alexey Toporensky (Sternberg Astronomical Inst., Moscow)
   Generality of Starobinsky inflation. — *30 min.*

3. Tomislav Prokopec (Utrecht U.)
   Conformal Higgs portal models. — *30 min.*

4. Mikhail Ivanov (IAS, Princeton & EPFL, Lausanne)
   Theory of Large Scale Structure: Successes, Challenges and Prospects. — *30 min.*

Coffee Break. 17:00 – 17:30

5. Nikolai Starkov (Lebedev Inst., Moscow)
   Nuclear Emulsions for WIMP Search with Directional Measurement (NEWSdm). — *30 min.*

6. Sergey Godunov (ITEP, Moscow)
   Evolution of a domain wall in expanding universe: inflation and after it. — *30 min.*

7. Anton Baushev (JINR, Dubna)
   Difficulties of N-body cosmological simulations and the physics of dark matter. — *30 min.*

Parallel Section #2 (Hall #2). 15:00

1. Evgeny Ivanov (BLTP JINR, Dubna)
   New deformations of $\mathcal{N} = 4$ and $\mathcal{N} = 8$ supersymetric mechanics. — *30 min.*

2. Khazret Nirov (INR RAS, Moscow)
   On representations of quantum groups and functional relations in integrable systems . — *30 min.*

3. Andrey Mironov (Lebedev Inst., Moscow)
   τ-function backstage: conformal blocks, Painleve, and Dijkgraaf-Vafa solutions. — *30 min.*

4. Andrey Morozov (IITP, Moscow)
   Tangle blocks in knot calculus. — *30 min.*

Coffee Break. 17:00 – 17:30

5. Maxim Zabzine (Uppsala U.)
   5D Yang-Mills and modular triple boson. — *30 min.*

6. Edvard Musaev (MIPT, Moscow)
   Dynamics of exotic branes of M-theory. — *30 min.*

7. Yegor Zenkevich (Milano Bicocca U. & ITEP, Moscow)
   Quantum toroidal algebras and gauge theory. — *30 min.*

8. Dmitri Bykov (Steklov Mathematical Inst., Moscow)
   Ricci-flat metrics and Killing-Yano tensors. — *30 min.*

9. Alexander Reshetnyak (ISPMS, Tomsk)
   On equivalence of unconstrained and constrained BRST- BFV Lagrangian formulations for Higher Spin Fields. — *20 min.*

Parallel Section #3 (Hall #3). 15:00

1. Mikhail Vysotsky (ITEP, Moscow)
   Resonances in positron scattering on a supercritical nucleus and spontaneous production of e^+e^- pairs. — *30 min.*

2. Petr Satunin (INR RAS, Moscow)
   Breit-Wheeler pair production in external electric field from worldline instantons. — *30 min.*

3. Sergei Demidov (INR RAS, Moscow)
   Constraints on multiparticle production in scalar field theory from classical simulations. — *30 min.*

4. Emin Nugaev (INR RAS, Moscow)
   Metastable Q-balls. — *30 min.*

Coffee Break. 17:00 – 17:30

5. Leonid Bezrukov (INR RAS, Moscow)
   Geoneutrinos, Earth intrinsic heat, Earth Electricity. — *30 min.*

6. Natalia Agafonova (INR RAS, Moscow)
   Possible explanation of the neutrino signal from SN1987A detected using the LSD. — *30 min.*

7. Aleksandr Nesterenok (Ioffe Inst., St Petersburg)
   Modelling C-type shocks in interstellar clouds. — *30 min.*

8. Azamat Khokonov (KBSU & BNO INR RAS)
   The star collapse dynamic with account of viscosity. — *20 min.*

Parallel Section #4 (Hall #4). 15:00

1. Mikhail Zubkov (Ariel U., Israel & ITEP, Moscow)
   Anomalous transport phenomena and momentum space topology. — *30 min.*

2. Igor Bogolubsky (JINR, Dubna)
   On effective gluon mass in lattice simulations. — *30 min.*

3. Dmitri Peresunko (NRC Kurchatov Inst., Moscow)
   Direct photons in pp and AA collisions. — *30 min.*

Coffee Break. 17:00 – 17:30

4. Larissa Bravina (Oslo U.)
   Anisotropic Flow in $A + A$ at 4-200 GeV. — *30 min.*

5. Oleg Teryaev (JINR, Dubna)
   Rotation and spin dynamics in heavy-ion collisions and anisoptropic Universe. — *30 min.*

Thursday, May 31

Parallel Section #1 (Hall #1). 10:00

1. Andrei Kataev (INR RAS, Moscow)
   The AVV trianle diagram in QCD and the generalized Crewter relation: scheme (in)dependent results. — *30 min.*

2. Anatoly Kotikov (JINR, Dubna)
   SUSY-like relation in evolution of gluon and quark jet multiplicities. — *30 min.*

3. Grigory Pivovarov (INR RAS, Moscow)
   Skewed Sudakov Regime. — *30 min.*

Coffee Break. 11:30 – 11:50

4. Victor Molokoedov (MIPT & Landau Inst. & INR RAS, Moscow)
   On the relation between pole and running masses of the heavy quarks and charged leptons. — *30 min.*

5. Dmitry Karlovets (Tomsk State U.)
   Scattering beyond the plane-wave approximation and probing of phases of scattering amplitudes. — *30 min.*

6. Alexander Biryukov (Samara National Research U.)
   Functional approach for the description of vacuum influence on electron states. — *30 min.*

Parallel Section #2 (Hall #2). 10:00

1. Alexander Belavin (Landau Inst., Moscow)
   The new approach to computing the Calabi-Yau moduli space geometry. — *30 min.*

2. Dario Francia (Scuola Normale Superiore di Pisa)
   Asymptotic symmetries and charges for arbitrary spin. — *30 min.*

3. Nikita Misuna (Lebedev Inst., Moscow)
   Lorentz covariance in higher-spin equations. — *30 min.*

Coffee Break. 11:30 – 11:50

4. Karapet Mkrtchyan (Max Planck Inst., Potsdam)
   Interactions of massless higher spin fields. — *30 min.*

5. Shane Farnsworth (Max Planck Inst., Potsdam)
   Particle physics from geometry. — *30 min.*

6. Alexey Isaev (JINR, Dubna)
   Double-spinor description of massive particles with arbitrary spins. — *30 min.*

Parallel Section #3 (Hall #3). 10:00

1. Vladimir Shevchenko (NRC Kurchatov Inst., Moscow)
   SHiP project as a new facility at intensity frontier. — *30 min.*

2. Dmitry Matvienko (Budker Inst. RAS, Novosibirsk)
   The Belle II experiment: status and physics. — *30 min.*

3. Dmitry Gorbunov (INR RAS, Msocow)
   Oscillations to hidden photon in reactor and accelerator experiments. — *30 min.*

Coffee Break. 11:30 – 11:50

4. Eugene Zhemchugov (ITEP, Moscow)
   Equivalent photons in proton-proton collisions at LHC: $pp(\gamma\gamma) \to l^+l^-pp$. — *30 min.*

5. Lev Dudko (Moscow State U.)
   BSM contribution to the off-shell electroweak top quark production. — *30 min.*

6. Petr Mandrik (NRC Kurchatov Inst.,Moscow & IHEP, Protvino)
   Top FCNC searches at HL-LHC with CMS. — *30 min.*

Parallel Section #4 (Hall #4). 10:00

1. Pierre Vanhove (Saclay U., Paris)
   On-shell methods for classical and quantum gravity. — *30 min.*

2. Andrej Arbuzov (JINR, Dubna)
   Conformally Coupled General Relativity. — *30 min.*

3. Andrey Shkerin (EPFL, Lausanne)
   Gravity, Scale Invariance and the Hierarchy problem. — *30 min.*

Coffee Break. 11:30 – 11:50

4. Anna Tokareva (INR RAS, Moscow)
   A simple UV completion to the Higgs and Higgs-dilaton inflation. — *30 min.*

5. Oleg Evseev (INR RAS, Moscow)
   No static spherically symmetric wormholes in Horndeski theory. — *20 min.*

6. Sergey Mironov (INR RAS, Moscow)
   Wormhole in beyond Horndeski theory. — *30 min.*

Parallel Section #1 (Hall #1). 15:00

1. Grigory Rubtsov (INR RAS, Moscow)
   Overview of Telescope Array results on ultra-high-energy cosmic rays. — *30 min.*

2. Yana Zhezher (INR RAS, Moscow)
   Ultra-high-energy cosmic rays mass composition studies with the Telescope Array Surface Detector data. — *20 min.*

3. Gašper Kukec Mezek (Nova Gorica U.)
   Mass composition of cosmic rays with energies from $10^{17.2}$ eV to 10^{20} eV using surface and fluorescence detectors of the Pierre Auger Observatory. — *30 min.*

4. Alexey Malgin (INR RAS, Moscow)
   Variation in the energy of cosmic ray muons underground. — *30 min.*

Coffee Break. 17:00 – 17:30

5. Oleg Kalashev (INR RAS, Moscow)
   Secondary signal from ultra-high energy cosmic rays produced by distant blazars. — *30 min.*

6. Maxim Pshirkov (Sternberg Astronomical Inst., MSU)
   Ultra-high energy cosmic rays and the strongest AGN flares. — *30 min.*

7. Timur Dzhatdoev (Moscow State U.)
   Intergalactic electromagnetic cascades in the magnetized Universe as a tool of astroparticle physics. — *30 min.*

8. Mikhail Kuznetsov (INR RAS, Moscow)
Search for ultra high energy photons with the Telescope Array experiment. — *30 min.*

Parallel Section #2 (Hall #2). 15:00

1. Andrei Khmelnitsky (ICTP, Italy)
Light particles with spin during inflation. — *30 min.*

2. Elizabeth Gould (University of Southampton, England)
Rethinking Time at the Big Bang. — *30 min.*

3. Sergey Vernov (Skobeltsyn Inst., Moscow State U.)
Non-local models with the Gauss-Bonnet term. — *30 min.*

4. Vasilisa Nikiforova (INR RAS, Moscow)
Issues in dynamical torsion gravity. — *30 min.*

Coffee Break. 17:00 – 17:30

5. Nikita Avdeev (Sternberg Astronomical Inst.,Moscow)
Manifestations of Horndesky Theory in Binary Systems with Pulsars. — *20 min.*

6. Yulia Ageeva (Moscow State U.)
Strong coupling in the Galilean Genesis Model. — *20 min.*

7. Polina Dyadina (Sternberg Astronomical Inst.,Moscow)
Post-Newtonian limit of hybrid f(R)-gravity. — *20 min.*

8. Ekaterina Pozdeeva (Skobeltsyn Inst.,Moscow State U.)
Inflationary Scenarios based on MSSM. — *20 min.*

Parallel Section #3 (Hall #3). 15:00

1. Konstantin Chetyrkin (Hamburg U.)
The structure of anomalous dimensions and no-π theorem for massless propagators. — *30 min.*

2. Alexander Penin (Alberta U.)
High energy limit of QCD. — *30 min.*

3. Sven-Olaf Moch (Hamburg U.)
   QCD splitting functions and cusp anomalous dimensions at four loopsD. — *30 min.*

4. Semyon Pozdnyakov (Ariel U., Israel)
   NNLO classical solution for Lipatovs effective action for reggeized gluons. — *30 min.*

Coffee Break. 17:00 – 17:30

5. Laszlo Jenkovszky (Bogolyubov ITP, Kiev)
   The Odderon in the light of recent TOTEM/CMS (LHC) measurement of the pp forward phase at 13 TeV. — *30 min.*

6. Andrei Barvinsky (Lebedev Inst., Moscow)
   Renormalization of gauge theories in the background-field approach. — *30 min.*

7. Alexander Reshetnyak (ISPMS, Tomsk)
   Generalization of Faddeev-Popov rules for Yang-Mills theories to the case of N-parametric BRST symmetries. — *30 min.*

8. Patricio Salgado-Rebolledo (Adolfo Ibaez U., Chile)
   Gribov Ambiguity and Degenerate Systems. — *30 min.*

Parallel Section #4 (Hall #4). 15:00

1. Alexandr Polyarush (INR RAS, Moscow)
   Study of radiative kaon decay using OKA detector. — *30 min.*

2. Artur Shaikhiev (INR RAS, Moscow)
   Search for exotics at NA62. — *30 min.*

3. Nikolay Achasov (Sobolev Inst. SB RAS, Novosibirsk)
   Exotics at Our Home. — *30 min.*

4. Alexey Kiselev (Sobolev Inst. SB RAS, Novosibirsk)
   Light scalar mesons and the data on two-kaon correlation functions. — *30 min.*

Coffee Break. 17:00 – 17:30

5. Alexander Dorokhov (JINR, Dubna)
   The proton size puzzle: experiment vs theory. — *30 min.*

6. Sergey Kulagin (INR RAS, Moscow)
   Nuclear parton distributions and applications to W/Z boson production in $p + Pb$ collisions at LHC. — *30 min.*

7. Alexey Zhevlakov (Tomsk State U.)
   CP-violation decays of eta and eta-prime mesons and EDM of neutron. — *30 min.*

8. Milos Dordevic (Vinca Inst., Belgrade U.)
   The CMS Particle Flow algorithm. — *30 min.*

Friday, June 1

Plenary Session. 10:00

1. Oleg Verkhodanov (Special Astrophysical Observatory RAS)
   Advanced stream search for galaxy clusters with multifrequency microwave data. — *30 min.*

2. Alexandr Dolgov (Novosibirsk State U. & ITEP, Moscow)
   New astronomical data and primordial black holes. — *30 min.*

3. Andrei Barvinsky (Lebedev Inst., Moscow)
   Hořava gravity is asymptotically free (in 2+1 dimensions). — *30 min.*

Coffee Break. 11:30 – 11:50

4. Nikolay Budnev (Irkutsk State U.)
   TAIGA – a hybrid array for high energy gamma astronomy and cosmic ray physics. — *30 min.*

5. Peter Lukin (Budker Inst. & Novosibirsk State U.)
   Measurements of exclusive hadronic cross sections at BABAR and the implication for the muon g-2 calculation. — *30 min.*

6. Viacheslav Duk (INR RAS, Moscow & Birmingham U.)
   First results on $K^+ \to \pi^+ \nu\bar{\nu}$ decay search from NA62. — *30 min.*

Parallel Section #1 (Hall #1). 15:00

1. Inar Timiryasov (EPFL, Lausanne)
   Low-scale leptogenesis. — *30 min.*

2. Sabir Ramazanov (CEICO, Czech Republic)
   Dark matter and baryon asymmetry of the very dawn of Universe. — *30 min.*

3. Elena Arbuzova (Dubna State U. & Novosibirsk State U.)
   Impact of gravitational baryogenesis on cosmological evolution. — *30 min.*

Coffee Break. 17:00 – 17:30

4. Alexander Kisselev (Logunov Inst. & NRC Kurchatov Inst.,Moscow)
   Bound on a flux of ultra-high energy neutrinos in a scenario with extra dimensions. — *30 min.*

5. Alexander Korochkin (INR RAS, Moscow)
   Constraining the star formation rate with the extragalactic background light. — *20 min.*

Parallel Section #2 (Hall #2). 15:00

1. Alexey Baskakov (Skobeltsyn Inst., Moscow State U.)
   Restrictions on the mass of the KK excitation W' from the Higgs boson diphoton decay and the single top production. — *30 min.*

2. Alexander Pankov (GSTU, Gomel & JINR, Dubna)
   First results on precise determination of $Z - Z'$ mixing with ATLAS and CMS diboson production data at the LHC at 13 TeV and predictions for RUN II. — *30 min.*

3. Anna Danilina (Moscow State U.)
   Differential distributions in rare four-leptonic B-decays. — *20 min.*

4. Anastasiia Kozachuk (Moscow State U.)
   Charm contribution to radiative leptonic B-decays. — *20 min.*

5. Elena Solovieva (MIPT & Lebedev Inst. RAS, Moscow)
   Recent developments in charmed baryon spectroscopy. — *20 min.*

Coffee Break. 17:00 – 17:30

6. Ivan Kharuk (INR RAS & MIPT, Moscow)
   Goldstone theorem for the spontaneous breakdown of spacetime symmetries. — *20 min.*

7. Andrey Shkerin (EPFL, Lausanne)
   On vibrational modes of Q-balls. — *20 min.*

8. Sergey Larin (INR RAS, Moscow)
   Higher-derivative relativistic quantum gravity. — *30 min.*

9. Alexander Popolitov (Uppsala U.)
   TBA. — *30 min.*

10. Yury Pismak (St.Petersburg State U.)
    Dispersion relations and dynamic characteristics of bound states in the model of Dirac field interacting with a material plane. — *30 min.*

Parallel Section #3 (Hall #3). 15:00

1. Grigory Feofilov (St.Petersburg State U.)
   Studies of strange and multi-strange particle production in ALICE at the LHC. — *30 min.*

2. Igor Altsybeev (St.Petersburg State U.)
   Event-by-event fluctuation measurements with ALICE. — *30 min.*

3. Dag Larsen (Jagiellonian U.)
   Open Charm measurements at the NA61 experiment at CERN SPS. — *30 min.*

4. Sonia Kabana (Nantes U. & Laboratory SUBATECH)
   Heavy Ion collisions at RHIC. — *30 min.*

Coffee Break. 17:00 – 17:30

5. Evgeny Andronov (St.Petersburg State U.)
   News from the NA61/SHINE experiment. — *20 min.*

6. Andrey Seryakov (St.Petersburg State U.)
   A hint of percolation threshold in heavy ion collisions at SPS energies. — *30 min.*

7. Vladimir Kovalenko (St.Petersburg State U.)
   Application of Bayesian Gaussian Process for Optimization of String Fusion Model Parameters. — *30 min.*

8. Daria Prokhorova (St.Petersburg State U.)
   Pseudorapidity dependence of multiplicity and transverse momentum fluctuations in pp collisions at the SPS energies. — *20 min.*

9. Svetlana Belokurova (St.Petersburg State U.)
   Asymptotes of multiplicity and transverse momentum correlation coefficients at large string density. — *20 min.*

Parallel Section #4 (Hall #4). 15:00

1. Yakov Shnir (BLTP JINR, Dubna)
   Broken Hopfions. — *30 min.*

2. Dmitri Melikhov (Skobeltsyn Inst., Moscow State U.)
   Exotic tetraquark mesons in large-Nc QCD. — *30 min.*

3. Sergey Afonin (St.Petersburg State U.)
   The large-Nc masses of light mesons from QCD sum rules and the scalar sigma-meson. — *30 min.*

4. Victor Kim (PNPI NRC KI & St. Petersburg Polytechnic U.)
   Probing cold dense baryon matter and cumulative processes. — *30 min.*

Coffee Break. 17:00 – 17:30

5. Vladimir Saleev (Samara National Research U.)
   From LO to NLO in the parton Reggeization approach. — *30 min.*

6. Andrey Kudlis (St.Petersburg State U.)
   Higher-order couplings of three-dimensional $O(n)$-symmetric ϕ^4 theory: multiloop renormalization-group analysis. — *20 min.*

7. Sergey Bityukov (IHEP, Protvino)
   On one method of comparing experimental and theoretical data. — *30 min.*

Saturday, June 2

Plenary Session. 10:00

1. Alexander Kovalenko (JINR, Dubna)
   Status of NICA at JINR. — *30 min.*

2. Catalin-Lucian Ristea (Inst. of Space Science, Bucharest)
   Recent results from the ALICE experiment at the LHC. — *30 min.*

3. Valery Nesvizhevsky (Institut Laue-Langevin, Grenoble)
   A new approach to improve the sensitivity to neutron-antineutron oscillations by many orders of magnitude. — *30 min.*

4. *Closing.*