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**International Workshop "Hadron Structure and Quantum Chromodynamics:  
from low to high energies" (HSQCD'2014)  
Gatchina, June 30 – July 4, 2014**

**B.P. Konstantinov Petersburg Nuclear Physics Institute (PNPI)  
National Research Center "Kurchatov Institute" (NRC KI)**

**Monday, June 30**

<b>11:00</b>	<b>Registration</b>
<b>11:45</b>	<b>Workshop Opening</b>
	<b>Chair: V. Kim</b>
<b>11:50</b>	<b>V. Aksenov (PNPI, Gatchina) "PNPI Director's opening remarks"</b>
<b>12:00</b>	<b>L. Lipatov (PNPI, Gatchina &amp; SPbSU) "Nonperturbative effects in the BFKL approach"</b>
<b>12:30</b>	<b>J. Vary (Iowa State U., Ames) "Basis Light-Front Quantization Method and Applications"</b>
<b>13:00- 14:30</b>	<b>Lunch</b>
	<b>Chair: S. Dubnicka</b>
<b>14:30</b>	<b>A. Glazov (DESY, Hamburg / H1 &amp; ZEUS Coll.) "Parton distribution functions and proton structure at HERA"</b>
<b>15:00</b>	<b>Y. Kim (Maryland U., College Park) "QCD. What else is needed for the proton structure function?"</b>
<b>15:30</b>	<b>B. Ermolaev (Ioffe FTI RAS, St. Petersburg) "QCD factorization as a tool to fit parton distributions"</b>
<b>15:50</b>	<b>D. Strozik-Kotlorz (Opole Technology U. &amp; JINR, Dubna) "Cut moments and a generalization of DGLAP equations"</b>
<b>16:10- 16:30</b>	<b>Coffee-break</b>
	<b>Chair: L. Lipatov</b>
<b>16:30</b>	<b>A. Vorobyev (PNPI, Gatchina / MuCap Coll.) "Pseudoscalar proton constant <math>g_P</math> from muon capture experiment MuCap"</b>
<b>17:00</b>	<b>G. Savvidy (INPP, Athens) "Asymptotic freedom of non-Abelian tensor gauge fields. Proton structure and tensor gluons"</b>
<b>17:30</b>	<b>A. Dorokhov (JINR, Dubna) "Hadronic light-by-light contribution to the muon <math>(g-2)</math> within nonlocal chiral quark model"</b>
<b>17:50</b>	<b>V. Kuvshinov (JINPR, Minsk) "Color particle behaviour in stochastic QCD vacuum"</b>
<b>18:10</b>	<b>Departure for hotels</b>

**Tuesday, July 1**

	<b>Chair: I. Dremin</b>
<b>09:30</b>	<b>I. Arefeva (Steklov MI RAS, Moscow) "Holographic approach for quark-gluon plasma in heavy ion collisions"</b>
<b>10:00</b>	<b>A. Andrianov (SPbSU) "QCD with axial chemical potential and polarization of dilepton production in heavy-ion collisions"</b>
<b>10:30</b>	<b>S. Obraztsov (SINP MSU, Moscow / CMS Coll.) "Heavy ion physics at CMS"</b>
<b>11:00-11:20</b>	<b>Coffee-break</b>
	<b>Chair: A. Vorobyev</b>
<b>11:20</b>	<b>K. Lau (Houston U. / Daya Bay Coll.) "Latest results from Daya Bay"</b>
<b>11:50</b>	<b>B. Jamieson (Winnipeg U. / T2K Coll.) "T2K neutrino oscillation results"</b>
<b>12:20</b>	<b>A. Serebrov (PNPI, NEUTRINO-4 Coll.) "Search for sterile neutrino at SM-3 reactor"</b>
<b>12:50</b>	<b>R. Jacobsson (CERN, Geneva/ SHIP Coll.) "An experiment to search for hidden particles at the CERN SPS"</b>
<b>13:10-14:00</b>	<b>Lunch</b>
	<b>Chair: Ya. Azimov</b>
<b>14:30</b>	<b>V. Kim (PNPI, Gatchina &amp; SPbSPU/ CMS Coll.) "Higgs boson and Standard Model at CMS"</b>
<b>15:00</b>	<b>B. Smart (Edinburgh U./ ATLAS Coll.) "Latest Higgs physics results from the ATLAS experiment"</b>
<b>15:30</b>	<b>A. Sapronov (JINR, Dubna / ATLAS Coll.) "Standard Model Measurements with the ATLAS Detector"</b>
<b>16:00-16:20</b>	<b>Coffee-break</b>
	<b>Chair: R. Jacobsson</b>
<b>16:20</b>	<b>V. Aushev (DESY, Hamburg / H1 &amp; ZEUS Coll.) "Heavy flavour production at HERA"</b>
<b>16:50</b>	<b>S. Sivoklokov (SINP MSU, Moscow/ ATLAS Coll.) "Heavy flavour studies with the ATLAS detector"</b>
<b>17:10</b>	<b>V. Oreshkin (PNPI, Gatchina / CMS Coll.) "High-pT QCD and heavy quarks at CMS"</b>
<b>17:30</b>	<b>S. Tokar (Comenius U., Bratislava / ATLAS Coll.) "Top quark studies with the ATLAS detector"</b>
<b>17:50</b>	<b>F. Lionetto (Zurich U. / LHCb Coll.) "Associated vector boson production in the forward acceptance"</b>
<b>18:10</b>	<b>Departure for Reception</b>
<b>19:00</b>	<b>The Gatchina Pavel Palace: Concert &amp; Workshop Reception</b>
<b>22:00</b>	<b>Departure for hotel</b>

**Wednesday, July 2**

**Chair: A. Dubnickova**

**09:30 Ya. Azimov (PNPI, Gatchina) "Exotic resonances X, Y, Z: Tetraquarks? Molecules?"**

**10:00 A. Polosa (Roma U.) "Production of X, Y, Z resonances"**

**10:30 N. Achasov (IM RAS, Novosibirsk) "What can be learned from the branching ratio  $X(3872) \rightarrow D^0 \bar{D}^0 + D^+ D^0$ "**

**11:00-11:20 Coffee-break**

**Chair: E. Bartos**

**11:20 D. Peshekhonov (JINR, Dubna / COMPASS Coll.) "COMPASS results"**

**11:50 K. Shirotori (RCNP, Osaka) "Hadron spectroscopy at J-PARC"**

**12:20 N. Kozlenko (PNPI, Gatchina / EPECUR Coll.) "Analysis of the narrow structures in the pion nucleon elastic scattering data from the EPECUR experiment"**

**12:40 V. Kuznetsov (PNPI, Gatchina) "New narrow  $N^*(1685)$  resonance: review of observations"**

**13:00-14:30 Lunch**

**Chair: A. Dorokhov**

**14:30 S. Dubnicka (IP SAS, Bratislava) "Indubitable evidence for  $f_0(500)$  scalar meson existence"**

**15:00 Yu. Surovtsev (JINR, Dubna) "The effect of multi-channel pion-pion scattering in decays of the Upsilon-family mesons"**

**15:20 E. Bartos (IP SAS, Bratislava) "On the precise determination of the differences of rho-meson"**

**15:40 C. Adamuscin (IP SAS, Bratislava) "Electromagnetic structure of vector mesons"**

**16:00-16:20 Coffee-break**

**Chair: S. Tokar**

**16:20 A. Malakhov (JINR, Dubna) "Asymptotic properties of nuclear matter"**

**16:50 R. Jacobsson (CERN, Geneva / LHCb Coll.) "The production of J/psi- and Upsilon -mesons, as well as Z-bosons in pPb collisions at  $\sqrt{s_{NN}}=5$  TeV"**

**17:20 A. Ivanov (PNPI & SPbSPU) "MC generator HARDPING: nuclear effects in hard interactions of leptons and hadrons with nuclei"**

**17:40 S. Shimanskiy (JINR, Dubna) "High-pT probing of baryonic matter"**

**18:00 D. Elumakhov (IHEP, Protvino) "Production of hadrons at large transverse momenta in 50 GeV p-A collisions"**

**18:20 Departure for hotels**

**Thursday, July 3**

**Chair: V. Aushev**

**09:30 M. Ryskin (PNPI, Gatchina) "Elastic scattering and diffractive dissociation in the light of LHC data"**

**10:00 I. Dremin (Lebedev PI RAS, Moscow) "The interaction region of high energy protons"**

**10:20 W. Schaefer (INP PAN, Krakow) "Lepton pair production with proton breakup at LHC energies"**

**10:40 N. Zotov (SINP MSU, Moscow) "Double parton scattering in double J/psi production at LHC"**

**11:00-11:20 Coffee-break**

**Chair: W. Schaefer**

**11:20 V. Spaskov (JINR, Dubna / H1 & ZEUS Coll.) "Diffraction at HERA"**

**11:50 V. Aushev (DESY, Hamburg / H1 & ZEUS Coll.) "QCD and hadronic final states at HERA"**

**12:10 E. Kuznetsova (PNPI, Gatchina / CMS Coll.) "Diffractive and exclusive processes at CMS"**

**12:30 G. Alves (CBPF MST, Rio de Janeiro / CMS Coll.) "Soft QCD and multi-parton interactions at CMS"**

**12:50 V. Murzin (PNPI, Gatchina / CMS Coll.) "Small-x and forward physics at CMS"**

**13:10-14:30 Lunch**

**Chair: N. Zotov**

**14:30 A. Sabio Vera (UA Madrid) "Recent progress in Regge limit"**

**14:50 B. Mistlberger (ETH, Zurich) "Toward the Higgs boson cross section in NNNLO"**

**15:10 G. Pivovarov (INR RAS, Moscow) "Combinatoric Renormalizability"**

**15:30 A. Kotikov (JINR, Dubna) "Pomeron in the N=4 supersymmetric gauge model"**

**15:50 V. Kim (PNPI, Gatchina & SPbSPU) "Search for BFKL in dijet production at LHC"**

**16:10-16:30 Coffee-break**

**16:30 Departure for hotels**

**21:30 Boat trip on Neva river**

**02:00 Departure for hotels**

**Friday, July 4**

	<b>Chair: S. Belostotsky</b>
<b>10:30</b>	<b>U. Schneekloth (DESY, Hamburg / OLYMPUS Coll.) "Two-photon exchange in electron-proton scattering – status of the OLYMPUS experiment at DESY"</b>
<b>11:00</b>	<b>D.Veretennikov (PNPI, Gatchina / OLYMPUS Coll.) "Luminosity measurement in the OLYMPUS experiment at DESY"</b>
<b>11:20-11:40</b>	<b>Coffee-break</b>
	<b>Chair: D. Peshekhonov</b>
<b>11:40</b>	<b>A. Liptaj (IP SAS, Bratislava) "Selected decays of B-mesons in the framework of covariant quark model"</b>
<b>12:00</b>	<b>N. Rossiyskaya (JINR, Dubna / COMPASS Coll.) "Study of Sigma(1385) and Xi(1321) hyperon and antihyperon production in DIS at COMPASS"</b>
<b>12:20</b>	<b>V. Solovyev (PNPI, Gatchina / ATLAS Coll.) "Searches for exotics with the ATLAS detector"</b>
<b>12:40</b>	<b>M. Marjanovic (IP, Belgrade / ATLAS Coll.) "Searches for SUSY with the ATLAS detector"</b>
<b>13:00-14:30</b>	<b>Lunch</b>
	<b>Chair: V. Kuvshinov</b>
<b>14:30</b>	<b>A. Matvienko (BINP RAS, Novosibirsk / Belle Coll.) "QCD effects in B-meson decays at Belle"</b>
<b>15:00</b>	<b>Yu. Goncharov (SPbSPU) "Estimates for parameters and characteristics of the confining SU(3)-gluonic field in neutral vector mesons from leptonic widths"</b>
<b>15:20</b>	<b>A. Semenova (PNPI, Gatchina) "Interaction amplitudes of baryons and mesons in composite superconformal string model"</b>
<b>15:40</b>	<b>V. Kudryavtsev (PNPI, Gatchina) "Elimination of parity doublets for baryons in composite superconformal string model"</b>
<b>16:00</b>	<b>G. Volkov (PNPI, Gatchina) "The fermion spin structure in the geometry of Abelian and non-Abelian finite groups"</b>
<b>16:20</b>	<b>M. Matveev (PNPI, Gatchina) "Hadron diffractive production at ultrahigh energies"</b>
<b>16:40</b>	<b>Workshop Closing</b>
<b>16:40-17:00</b>	<b>Coffee-break</b>
<b>17:00</b>	<b>Departure for hotels</b>