

XIII International Conference «SELECTED PROBLEMS OF MODERN THEORETICAL PHYSICS», Dubna June 23-27
22.06 Sunday, 17:00 - 21:00 Registration at the Hotel «Dubna»

	23.06 Mo	24.06 Tu	25.06 We	26.06 Th	27.06 Fr
<i>Chair</i>		<i>Kleinert</i>	<i>Slavnov A.</i>	<i>Mueller-Preussker</i>	<i>Shirkov</i>
09.00	<i>Registration</i>	Simonov	Arefeva	Levai	Achasov
09.30	Sissakian				
09.40		Reinhardt	Faddeev	Minkowski	Stefanis
10.00	Slavnov A.				
10.20		Von Smekal	Di Giacomo	Kazakov	Shevchenko
10.40	Zoupanos				
11.00 11.30	<i>Coffee break (11.20)</i>	<i>Coffee break</i>	<i>Coffee break</i>	<i>Coffee break</i>	<i>Coffee break</i>
<i>Chair</i>	<i>Voronov</i>	<i>Simonov</i>	<i>Faddeev</i>	<i>Kazakov</i>	<i>Di Giacomo</i>
11.30	Sorin (11.40)	Mueller-Preussker	Kleinert	Lipatov	Zakharov
12.10	Aksenov (12.20)	Polikarpov	Ivanov E.	Starobinsky	Vasiliev
12.50					Filippov
12.50 14.30	<i>Lunch(13.00-14.30)</i>	<i>Lunch</i>	<i>Lunch</i>	<i>Lunch</i>	<i>Closing (13.30)</i> <i>Farewell (14.00)</i>
	<i>Parallel Sessions</i>	<i>Parallel Sessions</i>	<i>Parallel Sessions</i>	<i>Parallel Sessions</i>	
14.30	QCDII	QCDIII	QCDI	QCDIII	
14.30	Math.Phys.	QFT	QCDIII	Hadronic Matter	
14.30	Quantum Theory	Math. Phys	Math. Phys	Gravity&Cosmology	
14.30	Gravity&Cosmology	Hadronic Matter	QFT		
16.00 16.30	<i>Coffee break</i>	<i>Coffee break</i>	<i>Coffee break</i>		
	<i>Parallel Sessions</i>	<i>Memorial Session</i>	<i>Parallel Sessions</i>		
<i>Chair</i>		Aksenov			
16.30	QCDII	Documentary about	QCDI		
16.30	Math.Phys.	DI Blokhintsev	QCDIII		
16.30	Quantum Theory		MathPhys		
16.30	Gravity&Cosmology		QFT		
17.00		Zrodnikov		<i>Boat Trip (17.00)</i>	
17.30		Kuzemsky			
18.00		Efimov			
18.30		Sukhanov			
19.00	<i>Welcome Party</i>	Kapuscik			
19:30			Exhibition of paintings by D.I. Blokhintsev (Concert Hall "MIR")	<i>Banquet (19:30)</i>	
20:00			Concert of DUBNA SYMPHONY ORCHESTRA (Concert Hall "MIR") 20:00)		

Parallel Sessions 23.06 – 26.06

June 23

	<i>QCD II</i>	<i>Math. Phys.</i>	<i>Quantum Theory</i>	<i>Gravity&Cosmology</i>
	Conference Hall 2nd floor	Lecture Hall 2nd floor	Blokhintsev Lecture Hall 4th floor	DIAS-TH Lecture Hall Ground floor
<i>Chair</i>	Zoupanos	Ivanov E	Jenkovszky	Zakharov A
14:30	Teryaev	Kotikov	Slavnov D.	Pervushin
15:00	Kochelev	Santangelo	Melezhik	Litim
15:20	Jenkovszky			
15:30		Berezin	Sukhanov	Ebert
15:40	Teckentrup			
16:00	Coffee break	Coffee break	Coffee break	Coffee break
<i>Chair</i>	Stefanis	Lavrov	Slavnov D.	Ebert
16:30	Boroun	Zupnik	Solov'ev	Pavlovsky O.
16:50	Arnold	Mayburov	Korobov	Arbuzov A.
17:10	Cherednikov	Bogolubsky	Trusov	Laperashvili
17:30	Bystritskiy	Pinzul	Dineykhani	Silenko
17:50	Bondarenco	Khruschov	Chizhov	Bodrova
18:10	Rezaei	Chubykalo	Pestov	Dimitrov

June 24

	Hadronic Matter	QCD III	QFT	Math. Phys.
	Lecture Hall 2nd floor	Conference Hall 2nd floor	DIAS-TH Lecture Hall Ground floor	Blokhintsev Lecture Hall 4th floor
<i>Chair</i>	Toneev	Dorokhov	Zhukovsky	Arefeva
14:30	Blaschke	Andrianov	Gladyshev	Vernov Yu.
15:00	Bugaev	Faustov	Arbuzov B.	Isaev
15:30	Shtalberg	Surovtsev	Dmitriev	Visinescu
15:50	Lyuboshitz	Machavariani	Moskaliuk	
16:10	Coffee break	Coffee break	Coffee break	Coffee break

June 25

	QCD I	QCD III	QFT	Math. Phys.
	Blokhintsev Lecture Hall 4th floor	Conference Hall 2nd floor	Lecture Hall 2nd floor	DIAS-TH Lecture Hall Ground floor
<i>Chair</i>	Polikarpov	Faustov	Arbuzov	Filippov
14:30	Cucchieri	Ivanov M.	Zhukovsky	Spiridonov
15:00	Pawlowski J.	Mathieu	Prokhorov	Sorin
15:20		Galkin		
15:30	Bornyakov		Tarasov	Belitsky
15:40		Kisselev		
16:00	Coffee break	Coffee break	Coffee break	Coffee break
<i>Chair</i>	Cucchieri	Andrianov	Vernov Yu.	Isaev
16:30	Polyakov	Dorokhov	Neznamov	Nutma
16:50	Mitrjushkin	Melikhov	Rodriguez	Lavrov
17:10	Rogalyov	Radzhabov	Khvedelidze	Reshetnyak
17:30	Veselov	Bakulev	Kosyakov	Alekseev
17:50	Trusov	Molodtsov	Isaev P	Krykhtin
18:10		Selyugin	Espinoza	Shavokhina

June 26

	<i>QCD III</i>	<i>Hadronic Matter</i>	<i>Gravity & Cosmology</i>
	Conference Hall 2 nd floor	Lecture Hall 2 nd floor	Blokhintsev Lecture Hall 4 th floor
<i>Chair</i>	Prokhorov	Levai	Pervushin
14:30	Mendes	Toneev	Frolov
15:00	Osipov	Klimenko	Vernov S.
15:20	Hiller	Okorokov	
15:30			Zakharov A.
15:40	Tlisov	Teryaev	
16:00			Manko

Plenary Sessions

Conference Hall, 2nd floor

June 23

- 9:30** **Sissakian Alexei N.** Opening of the Conference
10:00 **Slavnov Andrei A.** (Steklov MI RAS, Moscow)
Gauge invariant infrared regularization of the Yang-Mills theory
10:40 **Zoupanos Georgios** (NTUA, Athens)
Finite Unified Theories and the prediction of the Higgs mass
11:40 **Sissakian Alexei N., Sorin Alexander S.** (JINR, Dubna)
Project of the Nuclotron-based ion collider facility (NICA) at JINR:
perspectives of heavy ion and spin physics
12:20 **Aksenov Viktor L.** (JINR&KIAE, Dubna)
IBR-2 reactor in research of nanomaterials

June 24

- 9:00** **Simonov Yuri** (ITEP, Moscow)
QCD vacuum structure: confinement and chiral symmetry breaking
9:40 **Reinhardt Hugo** (ITP Uni Tübingen, Tübingen)

- Yang-Mills Theory in Coulomb Gauge
10:20 von Smekal Lorenz (University of Adelaide, Australia)
 The Prospect of Comparing Apples with Apples in Landau Gauge
 QCD, Functional Methods versus Lattice Simulations
11:30 Muller-Preussker Michael (Humboldt-University Berlin, Berlin)
 Infrared QCD from the lattice point of view
12:10 Polikarpov Mikhail (ITEP, Moscow)
 Entanglement entropy for strings and particles on the lattice

Memorial Session (16:30 – 19-00)

Documentary about D.I. Blokhintsev

Zrodnikov Anatoly V. (SSC RF IPPE, Obninsk)

Kuzemsky Alexander (JINR, Dubna)

The Works of D.I. Blokhintsev on Solid State and Statistical Physics

Efimov Garii (JINR, Dubna)

D.I. Blokhintsev and nonlocal quantum field theory

Sukhanov Aleksandr D., Golubjeva Olga N. (JINR & PFUR, Dubna & Moscow)

Development of Ensemble Approach in Quantum Physics: from Planck to Blokhintsev.

June 25

- 9:00 Arefeva Irina** (SMI RAS, Moscow)
 Micro Black Holes and Wormholes Production at the LHC
9:40 Faddeev Ludwig D. (SMI RAS, St. Petersburg)
 Hypothetical knot-like excitations in quantum Yang-Mills theory
10:20 Di Giacomo Adriano (Pisa Uni., Italy)
 On some features of color confinement
11:30 Kleinert Hagen (Freie Universität, Berlin)
 Multivalued fields
12:10 Ivanov Evgeny (JINR, Dubna)
 Landau Models on Supermanifolds

June 26

- 9:00 Levai Peter** (MTA KFKI RMKI, Hungary)
 Could we find quark-gluon plasma in pp collision at LHC?
9:40 Minkowski Peter (ITP Uni. Bern, Bern)
 On the class of chiral representations within QCD
10:20 Kazakov Dmitri (JINR, Dubna)
 Conformal deformations of N=4 SuperYang-Mills theories
11:30 Lipatov Lev N. (PNPI RAS, Gatchina)
 BFKL Pomeron and production amplitudes in N=4 SUSY
12:10 Starobinsky Alexei A. (Landau ITP, Moscow)

June 27

- 9:00 Achasov Nikolay** (Sobolev IM SB RAS, Novosibirsk)
Light scalar mesons today
- 9:40 Stefanis Nikolaos** (ITP II, Uni. Bochum, Bochum)
Renormalization-group approach to TMD PDFs in QCD
- 10:20 Shevchenko Oleg Yu.** (JINR, Dubna)
Theoretical foundations of spin program at NICA
- 11:30 Zakharov Valentin** (ITEP, Moscow)
Low-dimensional vacuum defects in Yang-Mills theories
- 12:10 Vasiliev Mikhail** (LPI RAS, Moscow)
Surprises in Higher-Spin Theory
- 12:50 Filippov Alexandre T.** (JINR, Dubna)
Integrable models of gravity and their application in cosmology

Section Talks

<i>Name</i>	<i>Title</i>	<i>Section</i>	<i>Duration</i>	<i>Date</i>
Alekseev G.	Integrability and monodromy preserving structure of symmetry reduced heterotic string effective equations	Math. Phys.	20 min	25.06
Andrianov V.	Parity violation in QCD motivated hadronic models at nonzero baryon densities	QCD III	30 min	24.06
Arbuzov A.	Initial data Higgs effect in Cosmology	Gravity & Cosmology	20 min	23.06
Arbuzov B.	Effective interactions in QCD and EW theory due to application of Bogoliubov compensation method	QFT	30 mn	24.06
Arnold S.	Parity-violating spin asymmetries in polarized proton-proton scattering with hadronic final states	QCD II	20 min	23.06
Bakulev A.	Polarized mu-pair pion-induced Drell--Yan production and the pion distribution amplitude	QCD III	20 min	25.06
Belitsky A.	Integrability in super-Yang-Mills theories	Math. Phys.	30 min	25.06
Berezin V.	Schroedinger equation in finite differences	Math. Phys.	30 min	23.06
Blaschke D.	Color superconducting quark matter	Hadronic Matter	30 min	24.06

<i>Name</i>	<i>Title</i>	<i>Section</i>	<i>Duration</i>	<i>Date</i>
Bodrova A.	Diffusion of rough granular particles - the components of Saturn Rings and other astrophysical objects	Gravity & Cosmology	20 min	23.06
Bogolubsky I.	Extended strings: some like defects, some like solitons	Math.Phys.	20 min	23.06
Bondarenco M.	High-energy hadron charge exchange reactions at small scattering angles	QCD II	20 min	23.06
Bornyakov V.	Lattice Gribov copies effects in various gauges	QCD I	30 min	25.06
Boroun G.	Solutions of DGLAP evolution equations for the gluon and structure function exponents and determination of the Reduced Cross Section	QCD II	20 min	23.06
Bugaev K.	On Finite Width of Quark Gluon Plasma Bags	Hadronic Matter	30 min	24.06
Bystritskiy Yu.	Radiative decays of pseudoscalar and vector mesons and process e^+e^- to PV	QCD II	20 min	23.06
Cucchieri A.	How to extract information from Green's functions in Landau gauge	QCD I	30 min	25.06
Cherednikov I.	Instanton-induced contributions to the Single-Spin Asymmetries: Sivers function	QCD II	20 min	23.06
Chizhov A.	Quantum Channel Decoherence in Optics	Quantum Theory	20 min	23.06
Chubykalo A.	Helmholtz theorem and the v -gauge in the problem of superluminal and instantaneous signals in classical electrodynamics	QFT	20 min	23.06
Dimitrov B.	Some Physical and Algebraic Geometry Aspects of Gravitational Theories with Covariant and Contravariant Metrics and Connections	Gravity & Cosmology	20 min	23.06
Dineykhon M.	Determination of mass spectrum few-body systems with relativistic effects	Quantum Theory	20 min	23.06
Dorokhov A.	Rare π -to- e^+e^- decay as a filter for low mass dark matter	QCD III	20 min	25.06
Ebert D.	Dynamical symmetry breaking for quark matter in the static Einstein universe	Gravity & Cosmology	30 min	23.06
Espinoza G.	On some unusual properties of wave solutions of free Maxwell equations	QFT	20 min	25.06
Faustov R.	Relativistic description of heavy tetraquarks	QCD III	30 min	24.06
Frolov A.	A singularity problem with $f(R)$ dark energy	Gravity & Cosmology	30 min	26.06
Galkin V.	Heavy baryons in the relativistic quark model	QCD III	20 min	25.06
Gladyshev A.	Long-lived superparticles at LHC	QFT	30 min	24.06
Hiller B.	Impact of eight-quark interactions on chiral phase transitions II: thermal effects	QCD III	20 min	26.06
Isaev A.	BRST operators for W-algebras	Math. Phys.	30 min	24.06
Isaev P	Desintegration of photons	QFT	20 min	25.06

<i>Name</i>	<i>Title</i>	<i>Section</i>	<i>Duration</i>	<i>Date</i>
Ivanov M.	Pion polarizabilities in ChPT	QCD III	30 min	25.06
Jenkovszky L.	Saturation effects in lepton- and hadron-induced reactions at high energies	QCD II	20 min	23.06
Kisselev A.	Hadron multiplicity from the top	QCD III	20 min	25.06
Klimenko K.	Masses of mesons and diquarks in color-flavor locked phase of dense quark matter	Hadronic Matter	20 min	26.06
Kosyakov B.	Massless charged and colored particles	QFT	20 min	25.06
Khrushov V.	Generalized kinematic symmetries of quantum phase space	Math. Phys.	20 min	23.06
Krykhtin V.	Gauge invariant Lagrangian formulation of higher spin massive	Math. Phys.	20 min	25.06
Khvedelidze A.	On the entangled spins precession in a strong laser field	QFT	20 min	25.06
Kochelev N.	Nonperturbative mechanism for single spin asymmetries in QCD	QCD II	20 min	23.06
Korobov V.	Precision spectroscopy and fundamental constants	Quantum Theory	20 min	23.06
Kotikov A.	Anomalous dimensions in N=4 SUSY	Math. Phys.	30 min	23.06
Laperashvili L., Das C.	E6 unification and Cosmology	Gravity & Cosmology	20 min	23.06
Lavrov P.	Fedosov and Riemannian supermanifolds	Math. Phys.	20 min	25.06
Litim D.	Fixed points of quantum gravity	Gravity & Cosmology	30 min	23.06
Lyuboshitz V.	Angular correlations in the decays of $\Lambda\Lambda$ and $\Lambda\bar{\Lambda}$ pairs produced in relativistic heavy ion collisions	Hadronic matter	20 min	24.06
Lykasov G.I., A.N.Sissakian, A.S.Sorin, O.V.Teryaev	Thermal effects for quark and gluon distributions in central heavy-ion collisions	Hadronic Matter	20 min	26.06
Machavariani A.	Ward-Takahashi identity, screening and the magnetic moment of the Delta resonance	QCD III	20 min	24.06
Manko V.	Conventional quantum mechanics and quantum gravity with probability instead of wave function-recent results	Quantum Theory	30 min	26.06
Mathieu V.	The glueball spectrum from constituent models	QCD III	20 min	25.06
Mayburov S.	Fuzzy space-time geometry and field quantization	MathPhys	20 min	23.06
Melezhik V.	Confinement induced center-of-mass non-separability in quantum two-body problem	Quantum Theory	30 min	23.06
Melikhov D.	Light-cone expansion of hadron form factors	QCD III	20 min	25.06

<i>Name</i>	<i>Title</i>	<i>Section</i>	<i>Duration</i>	<i>Date</i>
Mendes T.	Infrared propagators in MAG and Feynman gauge on the lattice	QCD I	30 min	26.06
Mitrjushkin V.	Gluon and ghost propagators in SU(2) LGT with Landau gauge and Gribov copies problem	QCD I	20 min	25.06
Molodtsov S.	Some semianalytical models of ground state in QCD	QCD III	20 min	25.06
Moskaliuk S.	Cayley-Klein Topological Quantum Field Theory	QFT	20 min	24.06
Narodetskii I., Trusov M.,	Heavy baryons in the field correlator method	QCD I	20 min	25.06
Neznamov V.	Standard model without Higgs bosons in the fermion sector	QFT	20 min	25.06
Nutma T.	Kac-Moody algebras & gauged supergravities	Math. Phys.	20 min	25.06
Okorokov V.	TBA	Hadronic Matter	20 min	26.06
Osipov A.	Impact of eight-quark interactions on chiral phase transitions I	QCD III	20 min	26.06
Pavlovsky O.	Born-Infeld Theory as low-energy limit of String Theory: from cosmology to hadron physics	Gravity & Cosmology	20 min	23.06
Pawłowski J.	Confinement, chiral symmetry breaking and the phase diagram of QCD	QCD I	30 min	25.06
Pervushin V.	On Relativistic Description of SN Ia data and the CMB Power Spectrum	Gravity & Cosmology	30 min	23.06
Pestov I.	New Concept of Time and Spin	Quantum Theory	20 min	23.06
Pinzul A.	UV/IR mixing in noncommutative field theories with twisted symmetry	Math. Phys.	20 min	23.06
Polyakov D.	Alpha-Symmetries, Gluon Scattering and Confining String	QCD III	20 min	25.06
Prokhorov L.	Physics at the Planck scales and unification of interactions	QFT	30 min	25.06
Radzhabov A.	Effects of mesonic correlations in the PNJL model	QCD III	20 min	25.06
Reshetnyak A.	On Lagrangian formulations for mixed-symmetry bosonic HS fields on AdS spaces within BFV-BRST approach	Math. Phys.	20 min	25.06
Rezaei B.	Next-to-Leading order Analysis of the Gluon Distribution at low x	QCD II	20 min	23.06
Rodriguez M.	Radiative Fermion masses at MSSM	QFT	20 min	25.06
Rogalyov R.	Techniques of One-Loop Computations in Lattice Perturbation Theory	QCD I	20 min	25.06
Santangelo E.	Phases of the Dirac determinant, Abelian Chern-Simons terms and Berry's phases in the field theoretic description of graphene	Math. Phys.	30 min	23.06
Shtalberg D.	Dynamics of the phase transition in nuclear matter	Hadronic Matter	20 min	24.06

<i>Name</i>	<i>Title</i>	<i>Section</i>	<i>Duration</i>	<i>Date</i>
Shavokhina N.	Fields and Minimal Surfaces: Classical and Quantum	Gravity & Cosmology	20 min	25.06
Selyugin O.	Gravimagnetic nucleon form-factors in the impact parameter representation	QCD III	20 min.	25.06
Silenko A.	Classical and quantum equations of spin motion for particles in nonstatic spacetimes	Gravity & Cosmology	20 min	23.06
Slavnov D.	Locality and nonlocality in the quantum theory	Quantum Theory	30 min	23.06
Smolyansky S., Dmitriev V.	Kinetics of vacuum creation of W and Z bosons in early universe	Gravity & Cosmology	20 min	24.06
Solov'ev E.	Problems of time and canonical transformation in quantum physics	Quantum Theory	20 min	23.06
Sorin A. S.	The arrow of time and Weil group: all supergravity billiards are integrable	Math. Phys.	30 min	25.06
Spiridonov V.	Elliptic integrable systems and elliptic hypergeometric functions	Math. Phys.	30 min	25.06
Sukhanov A.	Quantum Generalization of Equilibrium Statistical Thermodynamics	Quantum Theory	30 min	23.06
Surovtsev Yu.	Spectroscopic implications from the combined analysis of processes with pseudoscalar mesons	QCD III	20 min	24.06
Tarasov, O.	New relations between Feynman Integrals	QFT	30 min	25.06
Teckentrup T.	Wandzura-Wilczek approximations applied to transverse momentum dependent parton distributions	QCD II	20 min	23.06
Toneev V.	Hydrodynamic view at the NICA/CBM energy range	Hadronic Matter	30 min	26.06
Teryaev O.	Hidden Connections in Nucleon Spin Structure	QCD II	30 min	23.06
Tlisov D.	Rare four-leptonic B-meson decays	QCD III	20 min	26.06
Trusov M.	Feynman disentangling method and group theory	QFT	20 min	23.06
Vernov S.	Localization of Nonlocal Linear Cosmological Models	Gravity & Cosmology	30 min	26.06
Vernov Yu.	Reconstruction Theorem in Noncommutative Quantum Field Theory	Math. Phys.	30 min.	24.06
Veselov A.I., Bakker B.L.G., Zubkov M.A.	Monopoles in lattice electroweak theory	QCD I	20 min	25.06
Visinescu M.	Fermions on curved spaces and quantum anomalies	Math. Phys.	20 min	24.06
Zakharov A.	Constraints on dark matter distribution near the Galactic Centre	Gravity & Cosmology	30 min	26.06

<i>Name</i>	<i>Title</i>	<i>Section</i>	<i>Duration</i>	<i>Date</i>
Zhukovsky V.	Quantum effects in QED under the condition of Lorentz and CPT invariance violation	QFT	30 min	25.06
Zupnik B.M.	N=6 and N=8 threedimensional superfield BF-theories	Math. Phys.	20 min	23.06