

---

**JOINT INSTITUTE FOR NUCLEAR RESEARCH**

**Bogoliubov Laboratory of Theoretical Physics**

---

**SIS'18**

**Program of the International Workshop  
“Supersymmetry in Integrable Systems”**

*August 13 - 16, 2018, Dubna*

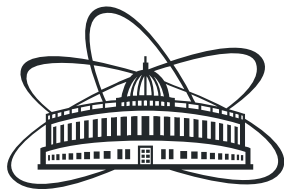
# SIS'18

## SCHEDULE

Blokhintsev Auditorium, 4-th floor

	Mon Aug 13	Tue Aug 14	Wed Aug 15	Thur Aug 16	
09.45 – 10.00	Opening				
10.00 – 10.30	Mironov	Lechtenfeld	Nersessian	Spiridonov	
10.30 – 11.00	Fring	Correa	Marshakov	Tyurin	
11.00 – 11.30	<i>Coffee break</i>		<b>Volga River cruise</b>	<i>Coffee break</i>	
11.30 – 12.00	Manvelyan	Ivanov		Tolstoy	
12.00 – 12.30	Feigin	Lukierski		Musaev	
12.30 – 13.00	Hakobyan	Fedoruk		Karakhanyan	
13.00 – 14.30	<i>Lunch</i>			<i>Lunch</i>	
14.30 – 15.00	Shnir	Smilga		Vinitsky	
15.00 – 15.30	Sarkissian	Antoniou		Gusev	
15.30 – 16.00	Silantyev	Sidorov		Golubtsova	
16.00 – 16.30	<i>Coffee break</i>			<i>Coffee break</i>	
16.30 – 17.00	Burdik	Kozyrev		Pavel	
17.00 – 17.30	Shin	Kaparulin		17.00 – 17.20 Podoinitsyn	
17.30 – 18.00	Demirchian	Shmavonyan		17.20 – 17.40 Provorov	
				19.00 – Dinner	17.40 – Closing

**Talk:** 30 minutes = 25 minutes (talk) + 5 minutes (questions)



JOINT INSTITUTE FOR NUCLEAR RESEARCH  
Bogoliubov Laboratory of Theoretical Physics

International Workshop  
“Supersymmetry in Integrable Systems”  
August 13 – 16, 2018, Dubna

SIS'18

**MONDAY, AUGUST 13**

**09.00 Registration**

*Chair – S. Krivonos*

**09.45 Opening**

**10.00 – 10.30 A. Mironov**

Correlators and Kroneker characters in tensor models

**10.30 – 11.00 A. Fring**

Time-dependent non-Hermitian systems - a status report

**11.00 Coffee Break**

*Chair – A. Mironov*

**11.30 – 12.00 R. Manvelyan**

Weyl Invariance and Higher Spin Gauge Theory

**12.00 – 12.30 M. Feigin**

On supersymmetric Calogero-Moser type systems

**12.30 – 13.00 T. Hakobyan**

Symmetries of generalized Calogero-type systems

**13.00 Lunch**

*Chair – M. Feigin*

**14.30 – 15.00 Ya. Shnir**

Gauged Merons

**15.00 – 15.30 G. Sarkissian**

Boundary three-point function in Liouville field theory

**15.30 – 16.00 A. Silantyev**

Spin Calogero - Moser integrable systems related with the cyclic quiver

**16.00 Coffee Break**

*Chair – T. Hakobyan*

**16.30 – 17.00 C. Burdik**

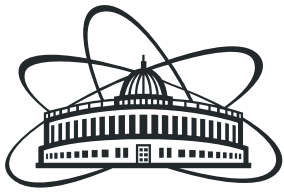
On the nested Bethe ansatz for RTT-algebra of  $\mathfrak{o}(5)$  type

**17.00 – 17.30 S. Shin**

Vacua and walls of mass-deformed Kähler nonlinear sigma models on  $SO(2N)/U(N)$  and  $Sp(N)/U(N)$

**17.30 – 18.00 H. Demirchian**

Integrable systems connected with Myers-Perry black hole



JOINT INSTITUTE FOR NUCLEAR RESEARCH  
Bogoliubov Laboratory of Theoretical Physics

International Workshop  
“Supersymmetry in Integrable Systems”  
August 13 – 16, 2018, Dubna

SIS'18

**TUESDAY, AUGUST 14**

*Chair – A. Nersessian*

- 10.00 – 10.30 O. Lechtenfeld**  
Rational Maxwell knots from de Sitter space
- 10.30 – 11.00 F. Correa**  
PT-deformation of Calogero-Sutherland models

**11.00 Coffee Break**

*Chair – R. Manvelyan*

- 11.30 – 12.00 E. Ivanov**  
Quaternion-Kähler deformations of N=4 mechanics
- 12.00 – 12.30 J. Lukierski**  
General extended d=3 Galilean SUSY and N=4 Galilean superparticle models
- 12.30 – 13.00 S. Fedoruk**  
Twistorial particles with continuous spin

**13.00 Lunch**

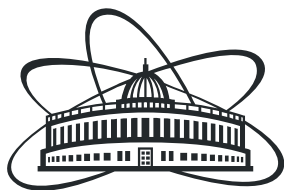
*Chair – F. Correa*

- 14.30 – 15.00 A. Smilga**  
Classical and quantum dynamics of higher-derivative systems
- 15.00 – 15.30 G. Antoniou**  
Saito metric and determinant on Coxeter discriminant strata
- 15.30 – 16.00 S. Sidorov**  
SU(4|1) supersymmetric mechanics

**16.00 Coffee Break**

*Chair – A. Smilga*

- 16.30 – 17.00 N. Kozyrev**  
Component action of N=2, d=6 Born-Infeld theory
- 17.00 – 17.30 D. Kaparulin**  
Multi-Hamiltonian Formulation for Extended Chern-Simons
- 17.30 – 18.00 H. Shmavonyan**  
C<sup>N</sup>-Smorodniky-Winternitz system in a constant magnetic field



**JOINT INSTITUTE FOR NUCLEAR RESEARCH  
Bogoliubov Laboratory of Theoretical Physics**

---

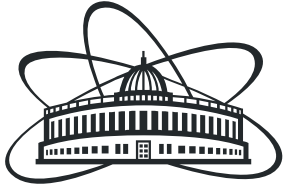
**International Workshop  
“Supersymmetry in Integrable Systems”  
August 13 – 16, 2018, Dubna**

**SIS'18**

**WEDNESDAY, AUGUST 15**

*Chair – O. Lechtenfeld*

- 10.00 – 10.30 A. Nersessian**  
CP<sup>N</sup>-generalization of Smorodinsky-Winternitz/Rosochatius system and its supersymmetrization
- 10.30 – 11.00 A. Marshakov**  
5d SUSY gauge theories and deautonomized cluster integrable systems
- 12.00 – 18.00 Volga river cruise**
- 19.00 Dinner**



JOINT INSTITUTE FOR NUCLEAR RESEARCH  
Bogoliubov Laboratory of Theoretical Physics

International Workshop  
“Supersymmetry in Integrable Systems”  
August 13 – 16, 2018, Dubna

SIS'18

THURSDAY, AUGUST 16

*Chair – A. Isaev*

- 10.00 – 10.30 **V. Spiridonov**  
6j-symbols for principal series representations of  $SL(2, \mathbb{C})$  group
- 10.30 – 11.00 **N. Tyurin**  
The moduli space of Special Bohr-Sommerfeld submanifolds

11.00 **Coffee Break**

*Chair – J. Lukierski*

- 11.30 – 12.00 **V. Tolstoy**  
Quantizations of  $N=1, D=3$  Lorentz supersymmetry
- 12.00 – 12.30 **E. Musaev**  
D-branes as a single object
- 12.30 – 13.00 **D. Karakhanyan**  
Orthogonal and symplectic Yangians and their representations

13.00 **Lunch**

*Chair – Ya. Shnir*

- 14.30 – 15.00 **S. Vinitzky**  
Construction of the Orthogonal Bargmann-Moshinsky Basis of  $SU(3)$  Group
- 15.00 – 15.30 **A. Gusev**  
System of Identical Particles with Pair Oscillator Interactions in Symmetric Coordinates
- 15.30 – 16.00 **A. Golubtsova**  
Black holes with AdS asymptotics as holographic RG flows

16.00 **Coffee Break**

*Chair – N. Tyurin*

- 16.30 – 17.00 **H.-P. Pavel**  
Low-energy spectrum of  $SU(3)$  Yang-Mills QM from the Integrable System closest to it
- 17.00 – 17.20 **M. Podoinitsyn**  
Behrends-Fronsdal spin projection operator for arbitrary space-time dimension
- 17.20 – 17.40 **A. Provorov**  
Deformed oscillators with  $so(3,4)$  symmetry

17.40 **Closing**