

Bogoliubov Laboratory of Theoretical Physics, Joint Institute for Nuclear Research  
A.I. Alikhanyan National Science Laboratory (Yerevan Physics Institute)

International Workshop “Supersymmetries and Quantum Symmetries – SQS'19”  
Yerevan, August 26 - August 31, 2019

<http://theor.jinr.ru/sqs19/>



## Program

The workshop will be held at the Ani Plaza hotel, 19 Sayat-Nova St, Yerevan. Plenary sessions and Section A sessions will be held at the Nairi conference room. Section B will be held at the Dvin conference room. Poster session will be organized during the coffee break.

### August 26, Monday

Opening: 09:00-09:30

Morning Session: 09:30-12:00

09:30-10:00	<b>Kellogg Stelle</b> <i>Braneworld gravity in a hyperbolic transverse space with a mass gap</i>
10:00-10:30	<b>Glenn Barnich</b> <i>Charged black body radiation</i>
10:30-11:00	<i>Coffee break</i>
11:00-11:30	<b>Martin Cederwall</b> <i>Extended geometry and tensor hierarchy algebras</i>
11:30-12:00	<b>Sergei Kuzenko</b> <i>Generalised Fayet-Iliopoulos terms in supergravity</i>

Lunch: 12:00-13:30

Afternoon Session: 13:30-17:30

	Section A	Section B
13:30-14:00	<b>Carlo Angelantonj</b> <i>The Geometry Behind Topological Amplitudes</i>	<b>Tigran Tchrakian</b> <i>Gravitational Chern-Simons, and Chern-Simons Gravity in all dimensions</i>
14:00-14:30	<b>Fabio Riccioni</b> <i>A new look at the exotic supergravity theories in six dimensions</i>	<b>Farhad Darabi</b> <i>f(T) quantum cosmology</i>
14:30-15:00	<b>Athanasios Chatzistavrakidis</b> <i>Graded geometry, tensor Galileons and duality</i>	<b>Mohammad Atazadeh</b> <i>DGP brane cosmology, gravitational baryogenesis</i>
15:00-15:30	<b>Edvard Musaev</b> <i>The different faces of branes in Double Field Theory</i>	<b>Alexander Burinskii</b> <i>Spinning Kerr's Gravity and Supersymmetric Model of Nonperturbative Unification</i>
15:30-16:00	<b>Coffee break</b>	
16:00-16:30	<b>Ilya Bakhmatov</b> <i>Generalized Yang-Baxter deformations in d=11 supergravity</i>	<b>Yakov Shnir</b> <i>Kerr black holes with synchronized hairs and boson stars</i>
16:30-17:00	<b>Franz Ciceri</b> <i>Higher derivative couplings from maximal conformal supergravity</i>	<b>Özgür Sarıoğlu</b> <i>Circularly symmetric solutions of Minimal Massive Gravity at its merger point</i>
17:00-17:30	<b>Boris Merzlikin</b> <i>Effective action in 6D, N=(1,1) SYM theory</i>	<b>Izzet Sakalli</b> <i>Entropy/Area Quantization of Schwarzschild-like Black Holes in Bumblebee Gravity Model</i>

Welcome party at "First Cafe", Khanjyan St, Yerevan: 19:00

## August 27, Tuesday

Morning Session: 09:30-12:00

09:30-10:00	<b>Bernard de Wit</b> <i>Supersymmetric localization with dynamical gravitons</i>
10:00-10:30	<b>Dimitri Gourevitch</b> <i>Quantum matrix algebras: a review</i>
10:30-11:00	<b>Coffee break</b>
11:00-11:30	<b>Ruben Minasian</b> <i>Anomalies, inflows and more</i>
11:30-12:00	<b>Michela Petrini</b> <i>New consistent truncations from generalised geometry</i>

Lunch: 12:00-13:30

Afternoon Session: 13:30-17:30

	Section A	Section B
13:30-14:00	<b>George Thompson</b> <i>Chern-Simons Theory on a General Seifert 3-Manifold</i>	<b>Robert Coquereaux</b> <i>Honeycombs and polytopes: another look at representation theory</i>
14:00-14:30	<b>Konstantin Alkalaev</b> <i>Conformal blocks with heavy background operators</i>	<b>Alexander Elashvili</b> <i>Cyclic elements in Simple Lie Algebras</i>
14:30-15:00	<b>Gor Sarkissian</b> <i>On properties of parafermionic hyperbolic gamma functions</i>	<b>David Karakhanyan</b> <i>On the representations of orthogonal and symplectic Yangians</i>
15:00-15:30	<b>Marine Samsonyan</b> <i>Supercurrents in N=1 Minimal Supergravity in the Superconformal Formalism</i>	<b>Cestmir Burdik</b> <i>Nested Bethe ansatz for RTT algebras <math>so_q(2n)</math> type</i>
15:30-16:00	<b>Coffee break</b>	

16:00-16:30	<b>Taejin Lee</b> <i>Tachyon Condensation and String Scattering Amplitudes</i>	<b>George Pogosyan</b> <i>Elliptic bases for Zernike system</i>
16:30-17:00	<b>Shigenori Seki</b> <i>String two-point amplitude revisited by operator formalism</i>	<b>Todor Popov</b> <i>Pseudo-plactic algebra and categorification of snakes numbers</i>
17:00-17:30	<b>Victor Lekeu</b> <i>Three-dimensional conformal geometry and prepotentials for four-dimensional fermionic higher-spin fields</i>	<b>Sajad Aghapour</b> <i>BMS Charges from BY Tensor in Double Foliation Formalism</i>

## August 28, Wednesday

Morning Session: 09:30-13:00

09:30-10:00	<b>Dmitri Kazakov</b> Non-renormalizable interactions: SUSY and non-SUSY
10:00-10:30	<b>Olaf Lechtenfeld</b> <i>From Yang-Mills in de Sitter space to electromagnetic knots</i>
10:30-11:30	<b>Poster Session + Coffee break</b>
11:30-12:00	<b>Burkhard Eden</b> <i>5-point functions from AdS/CFT integrability</i>
12:00-12:30	<b>Jerzy Lukierski</b> <i>Quantum deformations of twistors</i>
12:30-13:00	<b>Burt Ovrut</b> <i>R-Parity Violating Decays of Wino Chargino and Wino Neutralino LSPs in the B-L MSSM</i>

Poster Session: 10:30-11:30

<b>Maneh Avetisyan</b>	<i>On Universal Eigenvalues of Casimir Operator</i>
<b>Hovhannes Demirchian</b>	<i>Gravitational memory effect from impulsive signals</i>
<b>Georgios Karagiannis</b>	<i>Action construction and electric-magnetic duality in the framework of graded geometry</i>
<b>Melik Karapetyan</b>	<i>Solving Recurrence relations for radial pullback of cubic interaction in <math>AdS_{d+1}</math></i>
<b>Nikita Kolganov</b>	<i>Generalized unimodular gravity: symmetries and cosmological perturbations</i>
<b>Delaram Mirfendereski</b>	<i>Twist on multicenter black holes</i>
<b>Zahra Mirzaiyan</b>	<i>A progress report on the Subleading Soft Graviton</i>
<b>Fezzeh Naderi</b>	<i>Five dimensional black hole solutions in string theory with Thurston horizon geometries</i>

<b>Alexander Provorov</b>	<i>Superfield approach to N=2 Calogero model</i>
<b>Hovhannes Shmavonyan</b>	<i>Supersymmetric models on Kahler manifolds</i>

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

**Excursion to Garni & Geghard: 14:30-20:00**

## August 29, Thursday

Morning Session: 09:30-12:00

09:30-10:00	<b>Mikhail Vasiliev</b> <i>Higher-Spin gauge theories yesterday, today and tomorrow</i>
10:00-10:30	<b>Stefan Theisen</b> <i>Irrelevant operators and local renormalization group</i>
10:30-11:00	<b>Coffee break</b>
11:00-11:30	<b>Nicolas Boulanger</b> <i>Duality and Interactions for partially-massless spin-2 fields</i>
11:30-12:00	<b>Yurii Zinoviev</b> <i>Massive higher spins in the frame-like multispinor formalism</i>

Lunch: 12:00-13:30

Afternoon Session: 13:30-18:00

	Section A	Section B
13:30-14:00	<b>Alexei Isaev</b> <i>Twistorial and space-time description of massless infinite spin (super)particles and fields</i>	<b>Hrachya Babujian</b> <i>Correlation Functions of Classical and Quantum Artin System defined on Lobachevsky Plane</i>
14:00-14:30	<b>Olga Gelfond</b> <i>Recent Progress on Locality in HS Theory</i>	<b>Oleg Evnin</b> <i>Superintegrable quantum mechanics and resonant spacetimes</i>
14:30-15:00	<b>Alexey Sharapov</b> <i>Algebraic Deformation Theory and Higher Spin Interactions</i>	<b>Francisco Correa</b> <i>Complex and non-local solitons, integrability and quantum systems</i>
15:00-15:30	<b>Ruben Manvelyan</b> <i>Cubic Interaction for Higher Spins in AdS in the explicit covariant form</i>	<b>Dieter Van den Bleeken</b> <i>Renormalons in quantum mechanics</i>
15:30-16:00	<b>Coffee break</b>	

<b>16:00-16:30</b>	<b>Vyacheslav Didenko</b> <i>Higher order HS vertices</i>	<b>Alexei Deriglazov</b> <i>Deviations from geodesic motion in Kerr space due to spin</i>
<b>16:30-17:00</b>	<b>Evgeny Skvortsov</b> <i>Higher Spin Gravity and Three-dimensional Bosonization Duality</i>	<b>Farhang Loran</b> <i>One particle states in curved spacetimes</i>
<b>17:00-17:30</b>	<b>Timofey Snegirev</b> <i>On massive higher spin N=1 supermultiplets in 4D AdS</i>	<b>Habib Mazharimousavi</b> <i>Geometrical Particle Model</i>
<b>17:30-18:00</b>	<b>Nikita Misuna</b> <i>On unfolded off-shell formulation for higher-spin theory</i>	<b>Tigran Hakobyan</b> <i>Extended symmetry of generalized Polychronakos-Frahm chain</i>



## August 30, Friday

Morning Session: 09:30-12:00

09:30-10:00	<b>Oleg Ogievetsky</b> <i>Extremal configurations of solids and the Morse theory of distance functions</i>
10:00-10:30	<b>Gleb Arutyunov</b> <i>Hyperbolic spin Ruijsenaars-Schneider model from Poisson reduction</i>
10:30-11:00	<i>Coffee break</i>
11:00-11:30	<b>Valentina Petkova</b> <i>Analytic expression for the octagon form factor in N=4 SYM theory</i>
11:30-12:00	<b>Ruben Mkrtchyan</b> <i>Universality and quantum dimensions</i>

Lunch: 12:00-13:30

Afternoon Session: 13:30-17:30

	Section A	Section B
13:30-14:00	<b>Alessandro Tomasiello</b> <i>Holography, Matrix Factorizations and K-stability</i>	<b>Hovhannes Khudaverdian</b> <i>Thick morphisms, higher brackets and canonical transformations in classical mechanics</i>
14:00-14:30	<b>Stam Nicolis</b> <i>Supersymmetry and deterministic chaos</i>	<b>Simon Lyakhovich</b> <i>Theories with unfree gauge algebra: general properties, master equation, and quantization</i>
14:30-15:00	<b>Karapet Mkrtchyan</b> <i>Covariant Formulations for Chiral p-forms</i>	<b>Maxim Grigoriev</b> <i>Gauge theories as Q-bundles</i>
15:00-15:30	<b>Sunyoung Shin</b> <i>Three-pronged junctions on <math>SO(2N)/U(N)</math> and <math>Sp(N)/U(N)</math></i>	<b>Anna Pachol</b> <i>Introduction to the noncommutative digital differential geometry</i>

15:30-16:00	<b>Coffee break</b>	
16:00-16:30	<b>Nikolay Kozyrev</b> <i>Breaking of arbitrary amount of <math>d=3</math> supersymmetry</i>	<b>Arthemy Kiselev</b> <i>The Kontsevich graph orientation morphism revisited</i>
16:30-17:00	<b>Chrysoula Markou</b> <i>The linear dilaton: from the clockwork mechanism to its supergravity embedding</i>	<b>Kevin Morand</b> <i>M. Kontsevich's graph complexes and universal structures on graded symplectic manifolds</i>
17:00-17:30	<b>Vahid Hosseinzadeh</b> <i>Source and Response Soft Charges for Maxwell Theory on <math>AdS_d</math></i>	

**Workshop Dinner at “Bardiner” Restaurant, 71 Hrazdan Gorge, Yerevan: 19:00**

## August 31, Saturday

Morning Session: 09:30-12:30

09:30-10:00	<b>George Savvidy</b> <i>Generalisation of the Poincare Group and of the Yang-Mills theory</i>
10:00-10:30	<b>Igor Bandos</b> <i>On supermembranes and domain walls in D=4 supersymmetric theories</i>
10:30-11:00	<i>Coffee break</i>
11:00-11:30	<b>Rubik Poghossian</b> <i>Various facets of 2d-4d correspondence</i>
11:30-12:00	<b>Sergey Krivonos</b> <i>Supersymmetric Calogero models</i>
12:00-12:30	<b>Vladimir Sokolov</b> <i>Integrable non-linear differential equations with matrix variables</i>

Closing: 12:30