

Данные об официальных оппонентах и ведущей организации
по диссертации Федорука Сергея Алексеевича на тему «Классические и квантовые модели суперсимметричной механики и частиц высших спинов» на соискание учёной степени доктора физико–математических наук по специальности 01.04.02 – теоретическая физика

Официальные оппоненты:

1. Белавин Александр Абрамович

e-mail: belavin@itp.ac.ru

доктор физико-математических наук,

член-корреспондент РАН, профессор,

Институт теоретической физики им. Л.Д. Ландау Российской академии наук,

главный научный сотрудник

тел.: +7 (4957) 02-93-17

адрес: 142432, Московская область, г. Черноголовка, просп. Академика Семенова, д. 1-А

Список публикаций Белавина А.А. за 2012 - 2017 годы:

1. A.A. Belavin, V.A. Belavin, Minimal string theory and the Douglas equation, Int. J. Mod. Phys. A31 (2016) 1645038.
2. A. Belavin, V. Belavin, Flat structures on the deformations of Gepner chiral rings, JHEP 1610 (2016) 128.
3. A. Belavin, V. Belavin, On exact solution of topological CFT models based on Kazama–Suzuki cosets, J. Phys. A49 (2016) 41LT02.
4. A. Belavin, L. Spodyneiko, Flat structures on Frobenius Manifolds in the case of irrelevant deformations, J. Phys. A49 (2016) 495401.
5. A. Belavin, D. Gepner, Ya. Kononov, Flat coordinates of topological CFT and solutions of Gauss–Manin system, Письма в ЖЭТФ 103 (2016) 168-172.
6. А.А. Белавин, Д. Гепнер, Я.А. Кононов, Плоские координаты фробениусовых многообразий Сайто и теории струн, ТМФ 189 (2016) 429-445.
7. A. Belavin, V. Belavin, Minimal Liouville Gravity from Douglas string equation, Moscow Math. J. 15 (2015) 269-282.
8. А.А. Белавин, Л.А. Сподынейко, Пространственно-временная суперсимметрия в десятимерной теории струн в подходе Гепнера, ТМФ 185 (2015) 329-345.
9. A. Belavin, B. Dubrovin, B. Mukhametzhanov, Minimal Liouville Gravity correlation numbers from Douglas string equation, JHEP 1401 (2014) 156.

10. A.A. Belavin, V.A. Belavin, Frobenius manifolds, integrable hierarchies and minimal Liouville gravity, JHEP 1409 (2014) 151.
11. A.A. Belavin, M.A. Bershtein, B.L. Feigin, A.V. Litvinov, G.M. Tarnopolsky, Instanton moduli spaces and bases in coset conformal field theory, Comm. Math. Phys. 319 (2013) 269-301.
12. A. Belavin, B. Mukhametzhanov, N=1 superconformal blocks with Ramond fields from AGT correspondence, J. High Energy Phys, 1301 (2013) 178.
13. A.A. Belavin, M.A. Bershtein, G.M. Tarnopolsky, Bases in coset conformal field theory from AGT correspondence and Macdonald polynomials at the roots of unity, JHEP 1303 (2013) 019.
14. M.N. Alfimov, A.A. Belavin, G.M. Tarnopolsky, Coset conformal field theory and instanton counting on C^2/Z_p , JHEP 1308 (2013) 134.
15. A.A. Belavin, D.R. Gepner, Generalized Rogers Ramanujan Identities Motivated by AGT Correspondence, Lett. Math. Phys. 103 (2013) 1399-1407.

2. Зиновьев Юрий Михайлович

e-mail: yurii.zinoviev@ihep.ru

доктор физико-математических наук,

старший научный сотрудник,

Федеральное государственное бюджетное учреждение

"Государственный научный центр Российской Федерации – Институт физики высоких энергий",

главный научный сотрудник

тел.: +7 (3822) 52-17-51

адрес: 142281, Московская область, город Протвино, площадь Науки, дом 1

Список публикаций Зиновьева Ю.М. за 2012 - 2017 годы:

1. Yu.M. Zinoviev, Massive two-column bosonic fields in the frame-like formalism, Nucl. Phys. B913 (2016) 301-317.
2. Yu.M. Zinoviev, Towards the Fradkin–Vasiliev formalism in three dimensions, Nucl. Phys. B910 (2016) 550-567.
3. I.L. Buchbinder, T.V. Snegirev, Yu.M. Zinoviev, Unfolded equations for massive higher spin supermultiplets in AdS₃, JHEP 1608 (2016) 075.
4. Yu.M. Zinoviev, Massive higher spins in d=3 unfolded, J. Phys. A49 (2016) no.9, 095401.
5. I.L. Buchbinder, T.V. Snegirev, Yu.M. Zinoviev, Lagrangian formulation of the massive higher spin supermultiplets in three dimensional space-time, JHEP 1510 (2015) 148.
6. Yu.M. Zinoviev, Hypergravity in AdS₃, Phys. Lett. B739 (2014) 106-109.

7. I.L. Buchbinder, T.V. Snegirev, Yu.M. Zinoviev, Frame-like gauge invariant Lagrangian formulation of massive fermionic higher spin fields in AdS3, Phys. Lett. B738 (2014) 258-262.
8. I.L. Buchbinder, T.V. Snegirev, Yu.M. Zinoviev, Formalism of gauge-invariant curvatures and constructing the cubic vertices for massive spin-3/2 field in AdS4 space, Eur. Phys. J. C74 (2014) no.11, 3153.
9. Yu.M. Zinoviev, Massive spin-2 in the Fradkin–Vasiliev formalism. I. Partially massless case, Nucl. Phys. B886 (2014) 712-732.
10. Yu.M. Zinoviev, All spin-2 cubic vertices with two derivatives, Nucl. Phys. B872 (2013) 21-37.
11. I.L. Buchbinder, T.V. Snegirev, Yu.M. Zinoviev, On gravitational interactions for massive higher spins in AdS3, J. Phys. A46 (2013) 214015.
12. I.L. Buchbinder, T.V. Snegirev, Yu.M. Zinoviev, Gauge invariant Lagrangian formulation of massive higher spin fields in (A)dS_3 space, Phys. Lett. B716 (2012) 243-248.
13. Yu.M. Zinoviev, On massive gravity and bigravity in three dimensions, Class. Quant. Grav. 30 (2013) 055005.
14. I.L. Buchbinder, T.V. Snegirev, Yu.M. Zinoviev, Cubic interaction vertex of higher-spin fields with external electromagnetic field, Nucl.Phys. B864 (2012) 694-721.
15. Yu.M. Zinoviev, Gravitational cubic interactions for a massive mixed symmetry gauge field, Class. Quant. Grav. 29 (2012) 015013.

3. Лавров Петр Михайлович

e-mail: lavrov@tspu.edu.ru

доктор физико-математических наук,

профессор,

Федеральное государственное бюджетное образовательное учреждение высшего образования "Томский государственный педагогический университет",

заведующий кафедрой математического анализа

тел.: +7 (3822) 52-17-51

адрес: 634041, г. Томск, Комсомольский проспект, дом 75

Список публикаций Лаврова П.М. за 2012 - 2017 годы:

1. I.A. Batalin, P.M. Lavrov, Generalized sigma model with dynamical antisymplectic potential and non-Abelian de Rham's differential, Phys. Lett. B767 (2017) 99-102.

2. I.A. Batalin, P.M. Lavrov, Closed description of arbitrariness in resolving quantum master equation, Phys. Lett. B758 (2016) 54-58.
3. P.M. Lavrov, B.S. Merzlikin, Legendre transformations and Clairaut-type equations, Phys. Lett. B756 (2016) 188-193.
4. I.A. Batalin, K. Bering, P.M. Lavrov, A systematic study of finite BRST-BV transformations within W–X formulation of the standard and the Sp(2)-extended field–antifield formalism, Eur. Phys. J. C76 (2016) no.3, 101.
5. P.M. Lavrov P.M., B.S. Merzlikin, Loop expansion of average effective action in functional renormalization group approach, Phys. Rev. D92 (2015) no.8, 085038.
6. I.A. Batalin, P.M. Lavrov, Representation of a gauge field via intrinsic "BRST" operator, Phys. Lett. B750 (2015) 325-330.
7. I.A. Batalin, P.M. Lavrov, I.V. Tyutin, Finite anticanonical transformations in field-antifield formalism, Mod. Phys. Lett. A30 (2015) no.21, 1550108.
8. I.A. Batalin, P.M. Lavrov, Extended sigma-model in nontrivially deformed field-antifield formalism, Mod. Phys. Lett. A30 (2015) no.29, 1550141.
9. I.A. Batalin, P.M. Lavrov, Does the nontrivially deformed field-antifield formalism exist?, Int. J. Mod. Phys. A30 (2015) no.16, 1550090.
10. I.A. Batalin, Bering K., P.M. Lavrov, I.V. Tyutin, A systematic study of finite BRST-BFV transformations in Sp(2)-extended field-antifield formalism, Int. J. Mod. Phys. A29 (2014) no.29, 1450128.
11. I.A. Batalin, P.M. Lavrov, I.V. Tyutin, A systematic study of finite BRST-BFV transformations in generalized Hamiltonian formalism, Int. J. Mod. Phys. A29 (2014) no.23, 1450127.
12. P.M. Lavrov, O. Lechtenfeld, Gribov horizon beyond the Landau gauge, Phys. Lett. B725 (2013) 386-388.
13. P.M. Lavrov P.M., O. Lechtenfeld, Field-dependent BRST transformations in Yang-Mills theory, Phys. Lett. B725 (2013) 382-385.
14. P.M. Lavrov, I.L. Shapiro, On the functional renormalization group approach for Yang-Mills fields, J. High Energy Phys, 1306 (2013) 086.
15. M. Asorey, P.M. Lavrov, B. Ribeiro, I.L. Shapiro, Vacuum stress-tensor in spontaneous symmetry breaking theories, Phys. Rev. D85 (2012) 104001.

Ведущая организация:

Федеральное государственное бюджетное учреждение науки
Физический институт им. П.Н. Лебедева Российской академии наук (ФИАН)
e-mail: postmaster@lebedev.ru
тел.: +7 (499) 135-42-64
адрес: 119991, г. Москва, ГСП-1, Ленинский проспект, дом 53

Список избранных публикаций сотрудников ФИАН за 2012–2017 годы:

1. A.N. Manashov, E.D. Skvortsov, Higher-spin currents in the Gross-Neveu model at $1/n^2$, JHEP 1701 (2017) 132.
2. D. Ponomarev, E.D. Skvortsov, Light-Front Higher-Spin Theories in Flat Space, J. Phys. A50 (2017) 095401.
3. V.E. Didenko, N.G. Misuna, M.A. Vasiliev, Perturbative analysis in higher-spin theories, JHEP 1607 (2016) 146.
4. O.A. Gelfond, M.A. Vasiliev, Symmetries of higher-spin current interactions in four dimensions, ТМФ 187 (2016) 401-420.
5. R.R. Metsaev, Long, partial-short, and special conformal fields, JHEP 1605 (2016) 096.
6. K.B. Alkalaev, Many-point classical conformal blocks and geodesic networks on the hyperbolic plane, JHEP 1612 (2016) 070.
7. O.A. Gelfond, M.A. Vasiliev, Conserved higher-spin charges in AdS4, Phys. Lett. B754 (2016) 187-194.
8. A. Chekmenev, M. Grigoriev, Boundary values of mixed-symmetry massless fields in AdS space, Nucl.Phys. B913 (2016) 769-791.
9. R.R. Metsaev, The BRST-BV approach to conformal fields, J. Phys. A49 (2016) 175401.
10. K.B. Alkalaev, V.A. Belavin, From global to heavy-light: 5-point conformal blocks, JHEP 1603 (2016) 184.
11. O.A. Gelfond, M.A. Vasiliev, Higher-Rank Fields and Currents, JHEP 1610 (2016) 067.
12. R.R. Metsaev, BRST-BV approach to massless fields adapted to AdS/CFT correspondence, ТМФ 187 (2016) 323-337.
13. K.B. Alkalaev, V.A. Belavin, Monodromic vs geodesic computation of Virasoro classical conformal blocks, Nucl. Phys. B904 (2016) 367-385.
14. E. Skvortsov, D. Sorokin, M. Tsulaia, Correlation Functions of Sp(2n) Invariant Higher-Spin Systems, JHEP 1607 (2016) 128.
15. M.A. Vasiliev, Star-Product Functions in Higher-Spin Theory and Locality, JHEP 1506 (2015) 031.

Ученый секретарь
диссертационного совета
Д 720.001.01

А.Б. Арбузов
27.02.2017