

LIST OF PUBLICATIONS
Bulgarian National Science Foundation
Grant 02-257/18.12.2008 (2009-2012)

Total number of scientific papers: 159

BOOKS: 2

Total number of publications in international journals with impact-factor: 88

(Physical Review Letters - 1; Physical Review D - 21; JHEP (Journal of High Energy Physics) - 7; JCAP (Journal of Cosmology and Astroparticle Physics) - 1; Nuclear Physics B - 4; Physics Letters B - 7; Physical Review A - 1; Communications in Mathematical Physics - 2; Classical and Quantum Gravity – 2; General Relativity and Gravitation – 1; International Journal of Modern Physics A – 2; Advances of Theoretical and Mathematical Physics - 1; Journal of Geometric Analysis – 1; Journal of Physics A: Mathematical and General - 6; Fortschritte der Physik - 4; etc.)

Total number of publications in journals with unknown impact-factor: 13

Total number of publications of full-text contributions in proceedings of international conferences: 33

Total number of e-prints: 23

1. I. Todorov and L. Hadjiivanov, “Quantum Groups and Braid Group Statistics in Conformal Current Algebra Models”, ISBN 978-85-7772-045-3 163 p., (Lecture Notes, UFES, Vitoria, E.S., Brazil 2009).

2. E.I. Guendelman, A. Kaganovich, E. Nissimov and S. Pacheva, “Mass Inflation With Lightlike Branes”, Centr. Europ. Journ. Phys. 7 (2009) 668-676. [ISSN 1895-1082, IF 0.538]

3. E.I. Guendelman, A. Kaganovich, E. Nissimov and S. Pacheva, “Lightlike Branes: Mass Inflation and Lightlike Braneworlds”, in “Fifth Summer School in Modern Mathematical Physics”, B. Dragovich and Z. Rakic (eds.), Belgrade Inst. Phys. Press, 2009.

4. E.I. Guendelman, A. Kaganovich, E. Nissimov and S. Pacheva, „Variable-Tension Lightlike Brane as a Gravitational Source of Traversable

Misner-Wheeler-Type Wormholes”, **Phys. Lett.** B673 (2009) 288-292.
[ISSN 0370-2693, IF 4.189]

5. E.I. Guendelman, A. Kaganovich, **E. Nissimov** and **S. Pacheva**,
„*Lightlike Branes as Natural Candidates for Wormhole Throats*”, **Fortschr.**
Phys. 57 (2009) 566-572. [ISSN 0015-8208, IF 1.413]

6. E.I. Guendelman, A. Kaganovich, **E. Nissimov** and **S. Pacheva**,
„*Spherically Symmetric and Rotating Wormholes Produced by Lightlike*
Branes”, **Int. J. Mod. Phys.** A25 (2010) 1405 (arxiv:0904.0401[hep-th]).
[ISSN 0217-751X, IF 0.764]

7. E.I. Guendelman, A. Kaganovich, **E. Nissimov** and **S. Pacheva**,
„*Einstein-Rosen “Bridge” Needs Lightlike Brane Source*”, **Phys. Lett.** B681
(2009) 457-462. [ISSN 0370-2693, IF 4.189]

8. E.I. Guendelman, A. Kaganovich, **E. Nissimov** and **S. Pacheva**, „*Non-*
Singular Black Holes from Gravity-Matter-Brane Lagrangians”, **Int. J.**
Mod. Phys. A25 (2010) 1571 (arxiv:0908.4195[hep-th]). [ISSN 0217-751X,
IF 0.764]

9. E.I. Guendelman, A. Kaganovich, **E. Nissimov** and **S. Pacheva**,
„*Asymmetric Wormholes via Electrically Charged Lightlike Branes*”, in "Lie
Theory and Its Applications in Physics VIII", pp.60-75, V. Dobrev ed., AIP
Conference Proceedings vol.1243, Melville, New York (2010)
(arxiv:0911.0940[hep-th]).

10. E.I. Guendelman, A. Kaganovich, **E. Nissimov** and **S. Pacheva**, „*Space-*
Time Compactification Induced By Lightlike Branes”, **Invertis Journal of**
Science and Technology 3 (2010) #2 (arxiv:0912.3712[hep-th]).

11. E.I. Guendelman, A. Kaganovich, **E. Nissimov** and **S. Pacheva**, „*Space-*
Time Compactification/Decompactification Transitions Via Lightlike
Branes”, **General Relativity and Gravitation** 43 (2011) 1487-1513
(arxiv:1007.4893[hep-th]) [ISSN 0001-7701, IF 2.538].

12. **I. Todorov**, *Recent progress in four-dimensional conformal field theory*,
Proceedings of the 5th Mathematical Physics Meeting: Summer
School and Conference in Modern Mathematical Physics (Belgrade, July
2008), eds. B. Dragovich, Z. Rakić, Institute of Physics, Belgrade, 2009, pp.
433-444.

- 13. I. Todorov**, *Infinite Lie algebras and dual pairs in 4D CFT models*, Journal of Physical Mathematics **1** (2009) S090601.
- 14. I. Todorov**, *Minimal Representations and Reductive Dual Pairs in Conformal Field Theory*, **in**: "Lie Theory and Its Applications in Physics VIII", pp.13-30, V. Dobrev ed., AIP Conference Proceedings vol.1243, Melville, New York (2010).
- 15. I. Todorov**, *Infinite Dimensional Lie Algebras in 4D Conformal Field Theory*, Intern. Journ. Geom. Methods Mod. Phys., **5** (2009) 1361. [ISSN 0219-8878; IF 1.612]
- 16. N.M. Nikolov**, *Anomalies in quantum field theory and cohomologies of configuration spaces*, arXiv:0903.0187
- 17. N.M. Nikolov**, *Renormalization theory of Feynman amplitudes on configuration spaces*, arXiv:0907.3734
- 18. N.M. Nikolov**, *Cohomologies of configuration spaces and higher-dimensional polylogarithms in renormalization group problems*, **in**: "Lie Theory and Its Applications in Physics VIII", pp.165-178, V. Dobrev ed., AIP Conference Proceedings vol.1243, Melville, New York (2010)
- 19. N.M. Nikolov**, *Anomalies in quantum field theory and cohomologies of configuration spaces*, **in**: "Lie Theory and Its Applications in Physics VIII", V. Dobrev ed., AIP Conference Proceedings vol.1243, Melville, New York (2010), arXiv:0907.3735
- 20. A. Ahlbrecht, L.S. Georgiev, R.F. Werner**, *Implementation of Clifford gates in the Ising-anyon topological quantum computer*, Phys. Rev. **A 79** (2009) 032311, arXiv:0812.2338 [IF 2.866]
- 21. L.S. Georgiev**, *Computational equivalence of the two inequivalent spinor representations of the braid group in the Ising topological quantum computer*, J. Stat. Mech. (2009) P12013, arXiv:0812.2337. [IF 2.670]
- 22. L.S. Georgiev**, *Ultimate braid-group generators for exchanges of Ising anyons*, J. Phys. **A 42** (2009) 225203, arXiv:0812.2334. [IF 1.577]

- 23.** A. Cappelli, **L.S. Georgiev**, G.R. Zemba, *Coulomb blockade in hierarchical quantum Hall droplets*, J. Phys. A **42** (2009) 222001, arXiv:0902.1445. [IF 1.577]
- 24.** A. Ahlbrecht, **L.S. Georgiev**, R.F. Werner, *Monodromy analysis of the computational power of the Ising topological quantum computer*, in: "Lie Theory and Its Applications in Physics VIII", pp.279-288, V. Dobrev ed., AIP Conference Proceedings vol.1243, Melville, New York (2010) arXiv:0911.2591.
- 25.** **L.S. Georgiev**, *Thermal broadening of the Coloumb Blockade Peaks in Quantum Hall Interferometers*, EPL **91** (2010) 41001, , arXiv:1003.4871. [IF 1.968]
- 26.** O. Ogievetsky, **T. Popov**, *Cremmer-Gervais quantum Lie algebra*, Fortschritte der Physik **57** (2009) 654-658 [ISSN 0015-8208, IF 1.413]
- 27.** J.-L. Loday, **T. Popov**, *Hopf structure on standard Young tableaux*, in: "Lie Theory and Its Applications in Physics VIII", pp., V. Dobrev ed., AIP Conference Proceedings vol.1243, Melville, New York (2010)
- 28.** P. Furlan, **V.B. Petkova**, **M. Stanishkov**, *Non-critical string pentagon equations and their solutions*, J. Phys. A: Math. Theor. **42** (2009) 304016. [IF 1.577]
- 29.** P.Furlan, **V.B.Petkova**, **M.Stanishkov**, *3-point tachyon correlators in the open ZZ non-critical string*, Bulg. J. Phys. **36** (2009) 186 (special volume dedicated to the 75th anniversary of Academician Ivan Todorov).
- 30.** **V.B. Petkova**, *On the crossing relation in the presence of defects*, JHEP **04** (2010) 061. [IF 6.019]
- 31.** P.Furlan, **V.B.Petkova**, **M.Stanishkov**, *"A Finite Liouville Dress for $\mathcal{S}c < 1$ Boundary Degenerate Matter"*, Acta Polytechnica, **50**, No. 3 (2010) pp.84-89.
- 32.** Ch. Ahn, **M.Stanishkov**, M. Stoilov, *Higher Equations of Motion in $N=2$ Superconformal Liouville Field Theory*, arxiv:1010.5843[hep-th].

- 33.** N. Aizawa and **V.K. Dobrev**, *Intertwining Operator Realization of Non-Relativistic Holography*, Nucl. Phys. **B828** [PM] (2010) 581–593. [IF 4.341]
- 34.** **V.K. Dobrev**, “*Exceptional Lie Algebra $E_{7(-25)}$ (Multiplets and Invariant Differential Operators)*”, J. Phys. A: Math. Theor. **42** (2009) 285203. [IF 1.577]
- 35.** **V.K. Dobrev**, “*Note on Centrally Extended $su(2/2)$ and Serre Relations*”, Fortschr. Phys. **57**, No. 5–7, 542–545 (2009) [ISSN 0015-8208, IF 1.413]
- 36.** B. Abdesselam, A. Chakrabarti, **V.K. Dobrev** and **S.G. Mihov**, “*Exotic Bialgebras from 9×9 Unitary Braid Matrices*”, Physics of Atomic Nuclei **74**, 824–831 (2011) [IF - 0.563].
- 37.** **V.K. Dobrev** and **S. Stoimenov**, “*Singular Vectors and Invariant Equations for the Schrödinger Algebra in $n \geq 3$ Space Dimensions: the General Case*”, Physics of Atomic Nuclei **73**, 1916–1924 (2010) [IF - 0.563].
- 38.** **V.K. Dobrev**, “*Invariant Differential Operators for Non-Compact Lie Groups: the $E_{6(-14)}$ case*”, Invited Lectures at 5th Mathematical Physics Meeting: Summer School and Conference on Modern Mathematical Physics, Belgrade, 6-17.07.2008, Proceedings, Eds. B.Dragovich, Z. Rakic, (Institute of Physics, Belgrade, 2009) pp.95-124.
- 39.** M. Henkel and **S. Stoimenov**, “*On Non-local Representations of the Ageing Algebra: Geometric Interpretation and Covariant Two-Point Functions*”, Nucl. Phys. B847[FS] (2011) 612-627 [IF - 4.642].
- 40.** **E. Horozov**, “*Calogero-Moser Spaces and Representation Theory*”, Bulg. J. Phys. 36 (2009) 145–167.
- 41.** L. Heine, **E. Horozov** and P. Iliev, “*The trigonometric grassmannian and a difference W -Algebra*” Transf. Groups, 15 (2010) 92-114. [IF - 0.676]
- 42.** **S. Ivanov**, “*Heterotic supersymmetry, anomaly cancellation and equations of motion*” Phys. Lett. B 685 (2010), 190-196. [IF- 4.034]

- 43.** M. Fernandez, **S. Ivanov**, L. Ugarte and R. Villacampa, “*Non-Kaehler Heterotic String Compactifications with non-zero fluxes and constant dilaton*” *Comm. Math. Phys.* 288 (2009), 677-697. [IF - 2.075]
- 44.** M. Fernandez, **S. Ivanov**, L. Ugarte and R. Villacampa, “*Compact supersymmetric solutions of the heterotic equations of motion in dimension 5*”, *Nuclear Physics B* 820 (2009), 483-502. [IF - 4.642]
- 45.** **S. Ivanov**, **I. Minchev** and **D. Vassilev**, “*Extremals for the Sobolev inequality on the seven dimensional quaternionic Heisenberg group and the quaternionic contact Yamabe problem*”, *Journal Eur. Math. Soc.* 12 (2010) pp. 1041-1067. [IF - 1.079]
- 46.** **S. Ivanov** and **D. Vassilev**, “*Conformal quaternionic contact curvature and the local sphere theorem*”, *J. Math. Pures Appl.* 93 (2010), pp. 277-307. [IF - 1.204]
- 47.** **S. Ivanov**, **D. Vassilev**, and **S. Zamkovoy**, “*Conformal Paracontact curvature and the local flatness theorem*”, *Geom. Dedicata* 144 (2010), 79-100. [IF - 0.428]
- 48.** L.C. de Andres, M. Fernandez, **S. Ivanov**, J. Santisteban, L. Ugarte and **D. Vassilev**, “*Explicit Quaternionic Contact Structures and Metrics with Special Holonomy*”, arXiv:0903.1398[math.DG].
- 49.** **S. Ivanov**, **I. Minchev** and **D. Vassilev**, “*Quaternionic contact manifolds with a closed fundamental 4-form*”, **Bull. London Math. Soc.** 2010; doi: 10.1112/blms/bdq061; [IF - 0.757]
- 50.** **S. Ivanov**, **I. Minchev** and **D. Vassilev**, “*The optimal constant in the Folland-Stein inequality on the quaternionic Heisenberg group*”, *Ann. Sc. Norm. Super. Pisa Cl. Sci. (5) Vol. XI* (2012), 1-18; [IF - 0.695]
- 51.** L.C. de Andres, M. Fernandez, **S. Ivanov**, J. Santisteban, L. Ugarte and **D. Vassilev**, “*Quaternionic Kaehler and Spin(7) metrics arising from quaternionic contact Einstein structures*”, *Annali di matematica Pura ed Applicata*, (2012), DOI 10.1007/s10231-012-0276-8; [IF - 0.838]

52. J. Davidov, **S. Ivanov**, **I. Minchev**, "*The twistor space of a quaternionic contact manifold*", *Quart. J. Math. Oxford* (2011); 1-18; doi:10.1093/qmath/har012. [IF - 0.617]

53. **S. Ivanov**, A. Petkov, "*HKT manifolds with holonomy $SL(n,H)$* ", *Intern. Math. Res. Notices* (2011); doi: 10.1093/imrn/rnr160; [IF – 1.014]

54. Changrim Ahn, **Plamen Bozhilov**, "*Finite-size Effect of the Dyononic Giant Magnons in $N=6$ super Chern-Simons Theory*". *Phys.Rev.D79:046008,2009*. [IF - 4.922]

55. Changrim Ahn, **Plamen Bozhilov**, "*Finite-Size Dyononic Giant Magnons in TsT-transformed $AdS_5 \times S^5$* ", *JHEP* 1007, 048 (2010) (arXiv:1005.2508 [hep-th]). [IF - 6.019]

56. **Plamen Bozhilov**, "*Close to the Giant Magnons*". arXiv:1010.5465 [hep-th]

57. **Stoytcho S. Yazadjiev**, "*A classification (uniqueness) theorem for rotating black holes in 4D Einstein-Maxwell-dilaton theory*", **Phys. Rev. D** **82**, 124050 (2010) [IF - 4.922]

58. **Stoytcho S. Yazadjiev**, "*A Uniqueness theorem for black holes with Kaluza-Klein asymptotic in 5D Einstein-Maxwell gravity*", **Phys. Rev. D** **82**, 024015 (2010) (arXiv:1002.3954 [hep-th]). [IF - 4.922]

59. **Petya G. Nedkova**, **Stoytcho S. Yazadjiev**, "*Rotating black ring on Kaluza-Klein bubbles*", **Phys. Rev. D** **82**, 044010 (2010), arXiv:1005.5051 [hep-th]. [IF - 4.922]

60. **Stoytcho S. Yazadjiev**, **Petya G. Nedkova**, "*Sequences of dipole black rings and Kaluza-Klein bubbles*", **JHEP** **01**, 048 (2010), arXiv:0910.0938 [hep-th]. [IF - 6.019]

61. **Stoytcho S. Yazadjiev**, **Petya G. Nedkova**, "*Magnetized configurations with black holes and Kaluza-Klein bubbles: Smarr-like relations and first law*", **Phys. Rev. D** **80**, 024005(2009), arXiv:0904.3605 [hep-th] [IF - 4.922]

62. Stefan Hollands, **Stoytcho Yazadjiev**, “A uniqueness theorem for stationary Kaluza-Klein black holes”, to appear in **Comm. Math. Phys.** **302**, 631 (2011) [IF - 2.075].

63. Ivan Zh. Stefanov, **Stoytcho S. Yazadjiev**, Daniela A. Georgieva, Michail D. Todorov, “Born-Infeld black holes coupled to a massive scalar field”, **Int. J. Mod. Phys. D20**, 2471 (2011) [IF - 1.333].

64. Ivan Zh. Stefanov, **Stoytcho S. Yazadjiev**, Michail D. Todorov, “Stability of charged scalar-tensor black holes coupled to Born-Infeld nonlinear electrodynamics”, **Class. Quant. Grav.** **26**, 015006 (2009). [IF - 3.029]

65. Daniela D. Doneva, **Stoytcho S. Yazadjiev**, Kostas D. Kokkotas, Ivan Zh. Stefanov, Michail D. Todorov, “Charged anti-de Sitter scalar-tensor black holes and their thermodynamic phase structure”, **Phys. Rev. D** **81**, 104030 (2010), arXiv:1001.3569 [gr-qc]. [IF - 4.922]

66. Ivan Zh. Stefanov, **Stoytcho S. Yazadjiev**, Galin G. Gyulchev, “Connection between black-hole quasinormal modes and lensing in the strong deflection limit”, **Phys. Rev. Lett.** **104**, 251103 (2010), arXiv:1003.1609 [gr-qc] [IF - 7.328]

67. Daniela D. Doneva, **Stoytcho S. Yazadjiev**, Kostas D. Kokkotas, Ivan Zh. Stefanov, “Quasi-normal modes, bifurcations and non-uniqueness of charged scalar-tensor black holes”, **Phys. Rev. D** **82**, 064030 (2010), arXiv:1007.1767 [gr-qc] [IF - 4.922]

68. Galin N. Gyulchev, **Stoytcho S. Yazadjiev**, “Analytical Kerr-Sen Dilaton-Axion Black Hole Lensing in the Weak Deflection Limit”, **Phys. Rev. D** **81**, 023005(2010), arXiv:0909.3014 [gr-qc] [IF - 4.922]

69. D. Doneva, S. Yazadjiev, M. Todorov and I. Stefanov, „Numerical study of linear stability of scalar-tensor Born-Infeld black holes”, **AIP Conf. Proc.**, Volume 1186, pp. 159-165, 2009, 1st International Conference on Application of Mathematics in Technical and Natural Sciences.

70. D. Georgieva, I. Stefanov, M. Todorov, and S. Yazadjiev, „Charged Black Holes with Massive Scalar Field”, **AIP Conf. Proc.**, Volume 1186,

pp. 166-172, 2009, 1st International Conference on Application of Mathematics in Technical and Natural Sciences.

71. D. Doneva, S. Yazadjiev, M. Todorov and I. Stefanov, “*Stability analysis of scalar-tensor Born-Infeld black hole solutions*”, Proceedings of 12th Marcel Grossmann Meeting on General Relativity, **p. 1835**, Paris (2009).

72. Petya G. Nedkova, Stoytcho S. Yazadjiev, “*Sequences of dipole black rings and Kaluza-Klein bubbles*”, Proceedings of 12th Marcel Grossmann Meeting on General Relativity, **p.1084**, Paris (2009).

73. I. Stefanov, S. Yazadjiev, and M. Todorov , “*Phases of 4D black holes in scalar-tensor theories of gravity with non-linear electrodynamics*”, Proceedings of 12th Marcel Grossmann Meeting on General Relativity, **p. 2087** , Paris (2009).

74. Petya G. Nedkova, Stoytcho S. Yazadjiev, “*Rotating Black Ring on Kaluza-Klein Bubbles*”, **AIP Conf. Proc.**, Volume 1301, 347 (2010), 2nd International Conference on Application of Mathematics in Technical and Natural Sciences

75. Ivan Zh. Stefanov, Stoytcho S. Yazadjiev, Galin G. Gyulchev, “*Relation between the Parameters of a Gravitational Lens and the Frequencies of Black-hole Quasi-normal Modes*”, **AIP Conf. Proc.**, Volume 1301, 355 (2010), 2nd International Conference on Application of Mathematics in Technical and Natural Sciences

76. Galin N. Gyulchev, Stoytcho S. Yazadjiev, “*Analytical Kerr-Sen Dilaton-axion Black Hole Lensing in the Weak Deflection Limit*”, **AIP Conf. Proc.**, Volume 1301, 327 (2010), 2nd International Conference on Application of Mathematics in Technical and Natural Sciences

77. D. Georgieva, I. Stefanov, M. Todorov, S. Yazadjiev, “*Numerical investigation of charged black holes in the scalar-tensor theories of gravity with massive scalar field*”, Published in the proceedings of **BGSIAM’08**, pp. 37 - 40 (2009)

78. Daniela D. Doneva, Stoytcho S. Yazadjiev, Kostas D. Kokkotas, Ivan Zh. Stefanov, Michail D. Todorov, “*Thermodynamics of Scalar-Tensor AdS*

Black Holes Coupled to Nonlinear Electrodynamics”, **AIP Conf. Proc.**, Volume 1301, 313 (2010), 2nd International Conference on Application of Mathematics in Technical and Natural Sciences

79. I. Stefanov, D. Georgieva, **S. Yazadjiev**, and M. Todorov, „*Mathematical Modeling of Soliton-like Solutions in the Scalar-tensor Theories of Gravity*”, **AIP Conf. Proc.**, Volume 1186, pp. 173-179, 2009, 1st International Conference on Application of Mathematics in Technical and Natural Sciences.

80. D. Georgieva, M. D. Todorov, **I. Stefanov** and **S. Yazadjiev**, “*Phases of Soliton-like Solutions in the Scalar-tensor Theories of Gravity*”, **AIP Conf. Proc.**, Volume 1301, 321 (2010), 2nd International Conference on Application of Mathematics in Technical and Natural Sciences

81. H. Dimov, M. Michalcik and **R. C. Rashkov**, *Strings on the deformed $T\{1,1\}$: giant magnon and single spike solutions*, JHEP 0910 (2009) 019. [IF - 6.019]

82. M. Schimpf and **R. C. Rashkov**, *A note on strings in deformed $AdS_4 \times CP^3$: giant magnon and single spike solutions*, Mod. Phys. Lett. A 24 (2009) 3227. [IF - 1.075]

83. H. Dimov and **R. C. Rashkov**, *On the pulsating strings in $AdS_4 \times CP^3$* , Adv. High Energy Phys. 2009 (2009) 953987. [IF]

84. N.P. Bobev, **H. Dimov** and **R. C. Rashkov**, *Semiclassical Strings in Lunin-Maldacena Background* , Bulg. J. Physics 35 (2009) 274.

85. H. Dimov, M. Michalcik and **R. C. Rashkov**, *Solitonic sectors in the deformed background*, to appear in Fortschritte der Physik (2010)

86. Veselin G. Filev and **Radoslav C. Rashkov**, *Magnetic Catalysis of Chiral Symmetry Breaking. A Holographic Prospective*, Advances in High Energy Physics, Volume 2010, Article ID 473206, 56 pages (2010) doi:10.1155/2010/473206 [IF]

87. R. C. Rashkov, *Solitonic sectors in superstring theory*, Talk at the conference "Integrability in topological string and field theory" July 2009, SISSA, Italy; to appear in Fortschritte der Physik 2010.

88. R. C. Rashkov, *Solitonic sectors in the conifold background*, Talk given at the 2nd Workshop on Geometric Methods in Theoretical Physics, July 2009, SISSA, Italy; to appear in Fortschritte der Physik, 2010.

89. D. Arnaudov, H. Dimov and R.C. Rashkov, *On the pulsating strings in $AdS_5 \times T\{1,1\}$* , J. Phys. A: Math. Theor. **44** (2011) 495401. [IF – 1.564]

90. O. Ogievetsky, T. Popov, *R-matrices in Rime*, Advances in Theoretical and Mathematical Physics **14** (2010) 439-506 (arxiv:0704.1947v3[math.QA] May 2009) [ISSN 1095-0761; IF 2.034]

91. D. Arnaudov, H. Dimov and R.C. Rashkov, *On the pulsating strings in Sasaki-Einstein spaces*, AIP Conf. Proc. **1301** (2010) 51, Talk given at the 2nd Int. Conference AMiTaNS, 21-26 June 2010, Sozopol, Bulgaria, organized by EAC (Euro-American Consortium) for Promoting AMiTaNS.

92. E.I. Guendelman, A. Kaganovich, E. Nissimov, S. Pacheva, *"Space-Time Compactification, Non-Singular Black Holes, Wormholes and Braneworlds via Lightlike Branes"*, in "Sixth Meeting in Modern Mathematical Physics", B. Dragovich and Z. Rakic (eds.), SFIN XXIV A1, Belgrade Inst. Phys. Press (2011) [ISBN 978-86-82441-30-4].

93. E.I. Guendelman, A. Kaganovich, E. Nissimov, S. Pacheva, *"Asymptotically de Sitter and anti-de Sitter Black Holes with Confining Electric Potential"*, **Physics Letters B704** (2011) 230-233; erratum *Physics Letters B705* (2011) 545 [ISSN 1874-415X, IF 5.255].

94. E.I. Guendelman, A. Kaganovich, E. Nissimov, S. Pacheva, *"Hiding Charge in a Wormhole"*, **The Open Nuclear and Particle Physics Journal** 4 (2011) 27-34.

95. E.I. Guendelman, A. Kaganovich, E. Nissimov, S. Pacheva, *"Hiding and Confining Charges via "Tube-like" Wormholes"*, **International Journal of Modern Physics A26** (2011) 5211-5239 [ISSN 0217-751X, IF 1.000].

96. E.I. Guendelman, A. Kaganovich, E. Nissimov, S. Pacheva, *"Lightlike Braneworlds in Anti-de Sitter Bulk Space-times"*, in **Springer Proceedings**

in Mathematics and Statistics, vol.36, ed. V. Dobrev, Springer (2012) (arxiv:1112.2872[hep-th]), ISBN-978-4-431-54269-8.

97. E.I. Guendelman, A. Kaganovich , **E. Nissimov, S. Pacheva**, "*Dynamical Couplings, Dynamical Vacuum Energy and Confinement-Deconfinement in R^2 Gravity*", arxiv:1207.6775[hep-th], subm. to *Physics Letters B*.

98. **S. Ivanov, D. Vassilev**, *Extremals of the Sobolev inequality and the quaternionic contact Yamabe problem*, World Scientific Publishing Co. Pte. Ltd., Hackensack, NJ, 2011. xviii+219 pp.

99. M. Fernandez, **S. Ivanov**, L. Ugarte and R. Villacampa, "*Compact supersymmetric solutions of the heterotic equations of motion in dimensions 7 and 8*", Advances in Theoretical and Mathematical Physics 15 (2011), 245-284; [IF – 0.855]

100. L.C. de Andres, M. Fernandez, **S. Ivanov**, J. Santisteban, L. Ugarte and **D. Vassilev**, "*Bianchi type A hyper-symplectic metrics and hyper-Kaehler metrics in 4d*", Class. Quantum Grav., 29 (2012) 025003. [IF - 3.320]

101. **S. Ivanov**, A. Petkov, **D. Vassilev**, "*The sharp lower bound of the first eigenvalue of the sub-Laplacian on a quaternionic contact manifold*", to appear in J. Geom. Analysis; arXiv:1112.0779. [IF – 0.761]

102. **S. Ivanov**, G. Papadopoulos, "*Vanishing theorems on (l/k) -strong Kaehler manifolds with torsion*"; arXiv:1202.6470.

103. **S. Ivanov, D. Vassilev**, "*An Obata type result for the first eigenvalue of the sub-Laplacian on a CR manifold with a divergence free torsion*", arXiv:1203.5812.

104. **E. Horozov**, A. Mihajlova, "*An improved estimate for the number of zeros of Abelian integrals for cubic Hamiltonians*", Nonlinearity 23 (2010) 3053 (doi:10.1088/0951-7715/23/12/004).

105. P. Furlan, **L. Hadjiivanov**, *Quantum $su(n)_k$ monodromy matrices*, J. Phys. A: Math. Theor. **45**:16 (2012) 165202 (16 p.), [IF - 1.564].

- 106. L. Hadjiivanov, P. Furlan, On quantum WZNW monodromy matrix - factorization, diagonalization, and determinant, "**, in **Springer Proceedings in Mathematics and Statistics, vol.36**, ed. V. Dobrev, Springer (2012) (arXiv:1112.6274 [math-ph]), ISBN-978-4-431-54269-8 .
- 107. Changrim Ahn, Plamen Bozhilov, "Three-point Correlation functions of Giant magnons with finite size", Physics Letters B702 (2011), 286-290 .**
- 108. Changrim Ahn, Plamen Bozhilov, "Three-point Correlation Function of Giant Magnons in the Lunin-Maldacena background", Physical Review D84 (2011), 126011.**
- 109. Changrim Ahn, Plamen Bozhilov, "Finite-size Giant Magnons on $AdS_4 \times CP^3_{\gamma}$ ", Physics Letters B703 (2011), 186-192 .**
- 110. Plamen Bozhilov, "More three-point correlators of giant magnons with finite size", Journal of High Energy Physics 1108 (2011), 121.**
- 111. Plamen Bozhilov, "Three-point correlators: Finite-size giant magnons and singlet scalar operators on higher string levels", Nuclear Physics B855 (2012), 268-279 .**
- 112. V.B. Petkova, "Topological defects in CFT", in the proceedings of the conference SYMPHYS XV, Yerevan (2011), Physics of Atomic Nuclei (2012) (to appear). [IF 0.568]**
- 113. P. Bozhilov, P. Furlan, V.B. Petkova and M. Stanishkov, On the semiclassical 3-point function in AdS_3 , Physical Review D86 (2012) 066005 (7 pages). [IF 4.558]**
- 114. P. Bozhilov, P. Furlan, V.B. Petkova and M. Stanishkov, "Semiclassical 3-point function in WZW AdS_3 model", in the proceedings of the 20th Colloquium 'Integrable Systems and Quantum Symmetries', Prague (2012); to appear.**
- 115. V.K. Dobrev, "Group-Theoretical Classification of BPS and Possibly Protected States in $D=4$ Conformal Supersymmetry", Nucl. Phys. B854 (3) (2012) 878-893 [IF - 4.642].**

116. V.K. Dobrev, “*Group-Theoretical Classification of BPS States in $D=4$ Conformal Supersymmetry: the Case of $(1/N)$ -BPS*”, Phys. Part. Nucl. 43 (2012) 616–620 [IF - 1.100].

117. V.K. Dobrev, “*Explicit Character Formulae for Positive Energy UIRs of $D=4$ Conformal Supersymmetry*”, arXiv:1208.6250 [hep-th], CERN-PH-TH/2012-232.

118. V.K. Dobrev, “*Invariant Differential Operators for Non-Compact Lie Groups: the Main $SU(n,n)$ Cases*”, Physics of Atomic Nuclei, to appear [IF - 0.563].

119. V.K. Dobrev, “*Invariant Differential Operators for Non-Compact Lie Groups: the $Sp(n,R)$ Case*”, in **Springer Proceedings in Mathematics and Statistics, vol.36**, ed. V. Dobrev, Springer (2012) (arXiv:1205.5521 [hep-th], CERN-PH-TH/2012-143), ISBN-978-4-431-54269-8 .

120. V.K. Dobrev, “*Invariant Differential Operators for Non-Compact Lie Algebras Parabolically Related to Conformal Lie Algebras*”, arXiv:1208.0409 [hep-th], CERN-PH-TH/2012-215.

121. V.K. Dobrev, “*Invariant Differential Operators for Non-Compact Lie Groups: Euclidean Jordan Groups or Conformal Lie Groups*”, Plenary talk at the **20th Colloquium ‘Integrable Systems and Quantum Symmetries’**, Prague, 17-23.6.2012; to appear in the Proceedings, ed. C. Burdik et al.

122. N. Aizawa and V.K. Dobrev, “*Schrödinger Algebra and Non-Relativistic Holography*”, J. Phys.: Conf. Ser. 343 (2012) 012007.

123. V.K. Dobrev, “*Invariant Operators in Schrödinger Setting*”, Invited talk at **32nd International Conference on Quantum Probability and Related Topics**, Levico (Trento), 29.5-4.6.2011, to appear in the Proceedings, eds. L. Accardi et al.

124. B. Abdesselam, A. Chakrabarti, V.K. Dobrev and S.G. Mihov, “*Exotic Bialgebras from 9×9 Braid Matrices*”, in “**Quantum Groups, Quantum Foundations, and Quantum Information: a Festschrift for Tony Sudbery**”, J. Phys.: Conf. Ser. Vol. 254 (2010) 012001; 25 pages; ISSN 1742-6588.

- 125. V.K. Dobrev**, “*Representations and q -Deformation of Anti de Sitter Symmetry*”, Bulg. J. Phys. **38** (2011) 252–260.
- 126. M. Dubois-Violette, T. Popov**. *Homotopy commutative algebra and 2-nilpotent Lie algebra*, Proceedings *Algebra, Geometry and Mathematical Physics*, Mulhouse 2013, Editors A. Makhlouf, E. Paal, S. Silvestrov and A. Stolin, Conference Series Springer (to appear).
- 127. M. Dubois-Violette, T. Popov**. *Young tableaux and homotopy commutative algebra*, in *Springer Proceedings in Mathematics and Statistics, vol.36*, ed. V. Dobrev, Springer (2012), ISBN-978-4-431-54269-8.
- 128. O. Ogievetsky, T. Popov**. *Drinfeld-Jimbo Quantum Lie Algebra*. Proceedings of the workshop “*Scientific and Human Legacy of Julius Wess*”, International Journal of Modern Physics: Conference Series 13 (2012), 149-157.
- 129. M. Dubois-Violette and T. Popov**, *Homotopy Transfer and Self-Dual Schur Modules*, Physics of Particles and Nuclei 43 (2012), 708-710 [IF - 0.519].
- 130. I. Todorov**, *Conformal Field Theories with Infinitely Many Conservation Laws*, expanded version of a talk at the TH Journal Club on String Theory, CERN, February 27, 2012, [arxiv:1207.3661](https://arxiv.org/abs/1207.3661)[math-ph].
- 131. D. Arnaudov, R. C. Rashkov and T. Vetsov**, “*Three- and four-point correlators of operators dual to folded string solutions in $AdS_5 \times S^5$* ”, Int. J. Mod. Phys. A **26** (2011) 3403. [IF – 1.053]
- 132. D. Arnaudov, R. C. Rashkov and T. Vetsov**, “*Three-point correlators of operators dual to folded string solutions in $AdS_5 \times S^5$* ”, Bulg. J. Phys. **38** (2011) 329.
- 133. D. Arnaudov and R. C. Rashkov**, “*Quadratic corrections to three-point functions*”, Fortschr. Phys. **60** (2012) 217. [IF – 1.162]
- 134. D. Arnaudov and R. C. Rashkov**, “*On semiclassical four-point correlators in $AdS_5 \times S^5$* ”, arXiv:1206.2613 [hep-th].

- 135.** D. Arnaudov and **R. C. Rashkov**, "*Semiclassical calculation of three-point functions in $AdS_4 \times CP^3$* ", Phys. Rev. D **83** (2011) 066011. [IF – 4.558]
- 136.** D. Arnaudov and **R. C. Rashkov**, "*Three-point correlators: Examples from Lunin-Maldacena background*", Phys. Rev. D **84** (2011) 086009. [IF – 4.558]
- 137.** M. Michalcik, **R. C. Rashkov** and M. Schimpf, "*On semiclassical calculation of three-point functions in $AdS_5 \times T^{1,1}$* ", Mod. Phys. Lett. A **27** (2012) 1250091. [IF – 1.083]
- 138.** M. Michalcik, **R. C. Rashkov**, "*On finite size corrections to the dispersion relations of giant magnon and single spike on γ -deformed $T^{1,1}$* ", arXiv:1208.0698 [hep-th].
- 139.** M. Gary, D. Grumiller and **R. C. Rashkov**, "*Towards non-AdS holography in 3-dimensional higher spin gravity*", JHEP **1203** (2012) 022. [IF – 5.831]
- 140.** H. Afshar, M. Gary, D. Grumiller, **R. C. Rashkov** and M. Riegler, "*Non-AdS holography in 3-dimensional higher spin gravity - General recipe and example*", arXiv:1209.2860 [hep-th].
- 141.** Ch. Ahn, **M. Stanishkov** and M. Stoilov, "*Higher Equations of Motion in $N=2$ Superconformal Liouville Field Theory*", Phys. Lett. B **695** (2011) 501-506 [IF 5.255].
- 142.** **S. Stoimenov** and M. Henkel, "*Non-local space-times transformations generated from the ageing algebra*", in **Springer Proceedings in Mathematics and Statistics, vol.36**, ed. V. Dobrev, Springer (2012), ISBN-978-4-431-54269-8.
- 143.** M. Henkel and **S. Stoimenov**, "*Non-local representations of ageing algebra in higher dimensions*", based on the talk given by the second author at the University of Lorraine, preprint Univ. Nancy (2012).

- 144.** P. I. Slavov and **S. S. Yazadjiev**, "Hawking radiation of asymptotically non-flat dyonic black holes in Einstein-Maxwell-dilaton gravity," arXiv:1203.6309 [gr-qc] (accepted in **Phys. Rev. D**). (**IF - 4.558**)
- 145.** **D. D. Doneva, S. S. Yazadjiev**, "Non-radial oscillations of anisotropic neutron stars in Cowling approximation," **Phys. Rev. D** **85**, 124023 (2012) [arXiv:1203.3963 [gr-qc]]. (**IF - 4.558**)
- 146.** **S. S. Yazadjiev, D. D. Doneva**, "Nonradial oscillations of anisotropic neutron stars in the Cowling approximation," **JCAP** **1203**, 037 (2012) [arXiv:1112.4375 [gr-qc]]. (**IF - 5.723**).
- 147.** **P. G. Nedkova, S. S. Yazadjiev**, "Magnetized Black Hole on Taub-Nut Instanton," **Phys. Rev. D** **85**, 064021 (2012) [arXiv:1112.3326 [hep-th]]. (**IF - 4.558**)
- 148.** **S. Yazadjiev**, "Relativistic models of magnetars: Nonperturbative analytical approach," **Phys. Rev. D** **85**, 044030 (2012) [arXiv:1111.3536 [gr-qc]]. (**IF - 4.558**)
- 149.** **P. G. Nedkova, S. S. Yazadjiev**, "Thermodynamics of 5D Black Holes on Asymptotically Locally Flat Gravitational Instantons," **Phys. Rev. D** **84**, 124040 (2011) [arXiv:1109.2838 [hep-th]]. (**IF - 4.558**)
- 150.** **D. D. Doneva, K. D. Kokkotas, I. Z. Stefanov and S. S. Yazadjiev**, "Time Evolution of the Radial Perturbations and Linear Stability of Solitons and Black Holes in a Generalized Skyrme Model," **Phys. Rev. D** **84**, 084021 (2011) [arXiv:1107.5424 [gr-qc]]. (**IF - 4.558**)
- 151.** **S. S. Yazadjiev**, "Exact dark energy star solutions," **Phys. Rev. D** **83**, 127501 (2011) [arXiv:1104.1865 [gr-qc]]. (**IF - 4.558**)
- 152.** **S. Yazadjiev**, "Uniqueness and nonuniqueness of the stationary black holes in 5D Einstein-Maxwell and Einstein-Maxwell-dilaton gravity," **JHEP** **1106**, 083 (2011) [arXiv:1104.0378 [hep-th]]. (**IF - 5,831**)
- 153.** **D. D. Doneva, I. Z. Stefanov, S. S. Yazadjiev**, "Solitons and Black Holes in a Generalized Skyrme Model with Dilaton-Quarkonium field," **Phys. Rev. D** **83**, 124007 (2011) [arXiv:1102.4863 [gr-qc]]. (**IF - 4.558**)

154. P.D.Lasky and **D.D.Doneva**, "Stability and Quasinormal Modes of Black holes in Tensor-Vector-Scalar theory: Scalar Field Perturbations," **Phys. Rev. D** **82**, 124068 (2010), [arXiv:1011.0747 [gr-qc]].
(IF - 4.964)

155. L. S. Georgiev, "Hilbert space decomposition for Coulomb blockade in Fabry-Pérot interferometers", in **Springer Proceedings in Mathematics and Statistics, vol.36**, ed. V. Dobrev, Springer (2012)
(arXiv:1112.5946[math-ph]), ISBN-978-4-431-54269-8.

156. N. Nikolov, R. Stora, **I. Todorov**, *Euclidean Configuration Space Renormalization, Residues and Dilaton Anomaly*, in **Springer Proceedings in Mathematics and Statistics, vol.36**, ed. V. Dobrev, Springer (2012)
(CERN-TH-PH/2012-076), ISBN-978-4-431-54269-8.

157. N. Nikolov, R. Stora, **I. Todorov**, *Configuration Space Renormalization of Massless QFT as an Extension Problem for Associate Homogeneous Distributions*, Inst. Des Hautes Etudes Sci. preprint *IHES/P/11/07* (2011).

158. J.-L. Loday, **N.M. Nikolov**, *Operadic construction of the renormalization group*, in **Springer Proceedings in Mathematics and Statistics, vol.36**, ed. V. Dobrev, Springer (2012), ISBN-978-4-431-54269-8.

159. N.M. Nikolov, S. Zahariev, *Curved A_∞ -algebras and Chern classes*, to appear in the proceedings of "Geometric and Algebraic Structures in Mathematics" (a conference to celebrate Dennis Sullivan's 70th birthday, Stony Brook University, 2011).