

YerPhi-YSU node:List of publications

References

- [1] H. Arian Zad, R. Kenna, N. Ananikian, “Magnetic and thermodynamic properties of the octanuclear nickel phosphonate-based cage” *Physica A: Stat. Mech. Appl.* **538**(2019), 122841
- [2] H. Arian Zad, N. Ananikian, R. Kenna, “The specific heat and magnetic properties of two species of spin-1/2 ladders with butterfly-shaped unit blocks” *J. Phys.: Cond. Mat.* **31**(2019) No.44, 445802
- [3] H. Arian Zad, M. Sabeti, A. Zoshki, N. Ananikian, “Electrocaloric effect in the two spin-1/2 XXZ Heisenberg edge-shared tetrahedra and spin-1/2 XXZ Heisenberg octahedron with Dzyaloshinskii-Moriya interaction” *J. Phys.: Cond. Mat.* **31**(2019) No. 42, 425801
- [4] Z. Asghari, H. Arian Zad, “Enhancing electrical and thermoelectrical properties of WO₃ thin films by spray pyrolysis technique” [arXiv:1909.13358][physics.app-ph]
- [5] H. Arian Zad, N. Ananikian “Magnetic properties of a spin-1/2 Ising-Heisenberg Cairo pentagonal model” [arXiv:1908.04676][cond-mat.stat-mech]
- [6] H. Arian Zad, A. Zoshki, M. Sabeti, “Magnetic Properties of an Antiferromagnetic Spin-1/2 XYZ Model in the Presence of Different Magnetic Fields: Finite-Size Effects of Inhomogeneity Property” *Comm. Theor. Phys.* **71**(2019) No. 10, 1253-1260
- [7] V. Abgaryan, N. Ananikian, L. Ananikyan “Magnetic Properties and Entanglement of Nickel Containing Polymer” *Armenian Journal of Physics* 12(2019) No.3, 261-272
- [8] E. M. Benecha, I. R. Rahmonov, Yu. M. Shukrinov, A. E. Botha, N. Ananikian “Modeling of dc SQUIDS With Topologically Nontrivial Barriers” *Armenian Journal of Physics*, **12**(2019) No.3, 226-232
- [9] H. Arian Zad , A. Zoshki “Magnetic Properties of the Octanuclear Nickel Phosphonate-Based Cage” *Armenian Journal of Physics* 12 (2019) No.3, 254-260
- [10] S. G. Babajanyan, K. H. Cheong, A. E. Allahverdyan “Bargaining with entropy and energy” [arXiv:1910.06544][cond-mat.stat-mech]
- [11] S. G. Babajanyan, A. V. Melkikh, A. E. Allahverdyan “Leadership scenarios in prisoners dilemma game” *Physica A: Stat. Mech. Appl.* **541**(2019), 123020 doi.org/10.1016/j.physa.2019.123020
- [12] A. E. Allahverdyan, S. G. Babajanyan, C. K. Hu “Polymorphism in rapidly changing cyclic environment” *Phys. Rev. E* **100**(2019) No.3, 032401

- [13] H. M. Asatrian, C. Greub and J. Virto, “Exact NLO Matching and Analyticity in $b \rightarrow s\ell\ell$,” arXiv:1912.09099 [hep-ph].
- [14] M. Y. Avetisyan and R. L. Mkrtchyan, “On universal quantum dimensions of certain two-parameter series of representations,” arXiv:1909.02076 [math-ph].
- [15] M. Y. Avetisyan, “On Universal Eigenvalues of Casimir Operator,” arXiv:1908.08794 [math-ph].
- [16] M. Y. Avetisyan and R. L. Mkrtchyan, “ X_2 series of universal quantum dimensions,” J. Phys. A.: Math. Theor. **53** (2019) doi.org/10.1088/1751-8121/ab5f4d
- [17] M. A. Davtyan, Zh. S. Gevorkian, “Resonance Polarization Rotation in Photonic Crystals” Journal of Contemporary Physics (Armenian Academy of Sciences), **54**(2019) No. 3, 267-271 doi: 10.3103/S106833721903006X
- [18] M. O’Loughlin and H. Demirchian, “Geodesic congruences, impulsive gravitational waves and gravitational memory,” Phys. Rev. D **99** (2019) no.2, 024031
- [19] M. Feigin and T. Hakobyan, “Algebra of Dunkl Laplace-Runge-Lenz vector,” arXiv:1907.06706 [math-ph].
- [20] Zh. Gevorkian, V. Gasparian, E. Cuevas, “Straightening of light in a one dimensional dilute photonic crystal”, Scientific Reports **9**(2019) 14053
- [21] Zh. Gevorkian, K. Avjyan, L. Matevosyan, *et al*, “Determination of the complete set of optical parameters of micron-sized polycrystalline $\text{CH}_3\text{NH}_3\text{PbI}_3\text{-xCl}_x$ films from the oscillating transmittance and reectance spectra”, 2019, Materials Research Express **7** (2019) 016408 doi.org/10.1088/2053-1591/ab5c46.
- [22] Zh. Gevorkian, V. Farztdinov and Yu. Lozovik, “Quantum plateaus in dynamical Hall conductivity”, Physica E **111**(2019),148-151.
- [23] T. Hakobyan, “Symmetries of the generalized Calogero model and the Polychronakos-Frahm chain,” Phys. Rev. D **99** (2019) no.10, 105011
- [24] N. Izmailian, R. Kenna, “Universality and Exact Finite-Size Corrections for Spanning Trees on Cobweb and Fan Networks” Entropy **21**(2019) No. 9, 895
- [25] N. S. Izmailian, V. V. Papoyan, R. M. Ziff “Exact finite-size corrections in the dimer model on a planar square lattice” [arXiv:1904.05123][cond-mat.stat-mech]
- [26] C. N. Chen, C. K. Hu, N. S. Izmailian, M. C. Wu “Specific heat and partition function zeros for the dimer model on the checkerboard lattice: Finite-size effects” Phys. Rev. E **99**(2019) No.1, 012102

- [27] N. Y. Ivanov, A. V. Efremov and O. V. Teryaev, “Probing the linearly polarized gluons in unpolarized proton with heavy-quark pair production,” arXiv:1911.09742 [hep-ph].
- [28] N. Y. Ivanov, A. V. Efremov and O. V. Teryaev, “How to measure the linear polarization of gluons in unpolarized proton using the heavy-quark pair production,” EPJ Web Conf. **204** (2019) 02006 doi:10.1051/epjconf/201920402006
- [29] D. Karakhanyan and R. Kirschner, “Spinorial R operator and Algebraic Bethe Ansatz,” arXiv:1911.08385 [math-ph].
- [30] D. Karakhanyan and R. Kirschner, “Orthogonal and symplectic Yangians - representations of the quadratic evaluation,” J. Phys. Conf. Ser. **1194** (2019) no.1, 012058.
- [31] D. R. Karakhanyan and R. Kirschner, “Orthogonal and symplectic Yangians and Lie algebra representations,” Theor. Math. Phys. **198** (2019) no.2, 239 doi:10.1134/S0040577919020053
- [32] S. Tonoyan, D. Khechoyan, Y. Mamasakhlisov, A. Badasyan “Statistical mechanics of DNA-nanotube adsorption” [arXiv:1912.01874][cond-mat.soft]
- [33] A. Asatryan, S. Tonoyan, Y. Mamasakhlisov, V. Morozov “Concentrational dependence of melting temperature: possible explanation of non-monotonic behavior” Journal of Biomolecular Structure and Dynamics**37**(2019), 77-78 2019
- [34] Y. Mamasakhlisov, H. Sngryan, S. Tonoyan, A. Hakobyan, P. Vardevanyan “The double-stranded DNA stability in presence of a flexible polymer” Journal of Biomolecular Structure and Dynamics **37** No.5, 1099-1103
- [35] M. Karapetyan, R. Manvelyan and R. Poghossian, “Cubic interaction for higher spins in AdS_{d+1} space in the explicit covariant form,” Nucl. Phys. B **950** (2020) 114876 [arXiv:1908.07901 [hep-th]].
- [36] N. V. Ter-Oganessian, S. A. Guda, V. P. Sakhnenko, V. Ohanyan “Magnetic and magnetoelectric properties of $AFeF_5$ ($A= Ca, Sr$) spin-chain compounds” Journal of Magnetism and Magnetic Materials **493**(2020), 165720 [arxiv:1903.10828][cond-mat.str-el]
- [37] G. Sarkissian and V. P. Spiridonov, “General modular quantum dilogarithm and beta integrals,” arXiv:1910.11747 [hep-th].
- [38] D. Fioravanti, H. Poghosyan and R. Poghossian, “ T , Q and periods in $SU(3) \mathcal{N} = 2$ SYM,” arXiv:1909.11100 [hep-th].
- [39] E. Ivanov, A. Nersessian, S. Sidorov and H. Shmavonyan, “Symmetries of deformed supersymmetric mechanics on Kähler manifolds,” Phys. Rev. D (accepted) arXiv:1911.06290 [hep-th].

- [40] S. Krivonos, A. Nersessian and H. Shmavonyan, ‘Geometry and integrability in $\mathcal{N} = 8$ supersymmetric mechanics,’ Phys. Rev. D (submitted) arXiv:1908.06490 [hep-th].
- [41] E. Ivanov, A. Nersessian and H. Shmavonyan, “ CP^N -Rosochatius system, superintegrability, supersymmetry,” Phys. Rev. D **99** (2019) no.8, 085007
- [42] G. Nikoghosyan, E. A. Kolganova, D. A. Sazonov and R. V. Jolos, “Collective treatment of the isovector pair correlations. Boson representation,” Eur. Phys. J. A **55** (2019) no.10, 189
- [43] H. S. Nikoghosyan, S. L. Harutyunyan, V. F. Manukyan, G. H. Nikoghosyan, “Coherent bleaching of the medium with Raman scattering under conditions of strong size quantization” Physica B **575** (2019) 411710
- [44] H.S. Nikoghosyan, V.F. Manukyan, S.L. Harutyunyan, G.H. Nikoghosyan, “Effect of Self-Induced Transparency in a Massive of Spherical Quantum Dots Under the Conditions of Strong Dimensional Quantization” Journal of Contemporary Physics **54**(2019) No.3 , 272-281.
- [45] H.S. Nikoghosyan, S.L. Harutyunyan, V.F. Manukyan, G.H. Nikoghosyan, “Quantum Model of a Trapezoidal Limiting Potential Profile in a Spherical Nanocrystal” Journal of Contemporary Physics **54** (2019) No. 4 , 345-350.
- [46] H.S. Nikoghosyan, V.F. Manukyan, G.H. Nikoghosyan, “The phenomenon of nonstationary nutation in the system of two-level quantum wells of a periodic superlattice with strong magnetic quantization” J. Phys.: Conf. Ser. **1400** (2019)055004
- [47] H. Shmavonyan, “ C^N -SmorodinskyWinternitz system in a constant magnetic field,” Phys. Lett. A **383** (2019) 1223
- [48] A. Amekhyan, S. Sargsyan and A. Stepanian, “On the role of dust in the microwave emission of galactic halos,” Mod. Phys. Lett. A **34** (2019) no.37, 1950308
- [49] V. G. Gurzadyan and A. Stepanian, “ H_0 tension: clue to common nature of dark sector?,” Eur. Phys. J. C **79** (2019) no.7, 568
- [50] A. Stepanian, “On the invalidity of ”negative mass” description of the dark sector,” Mod. Phys. Lett. A **34** (2019) no.35, 1975002
- [51] V. G. Gurzadyan and A. Stepanian, “The cosmological constant derived via galaxy groups and clusters,” Eur. Phys. J. C **79** (2019) no.2, 169
- [52] V. G. Gurzadyan and A. Stepanian, “Cosmological constant as a fundamental constant,” Eur. Phys. J. Plus **134** (2019) 98