

Curriculum Vitae

Name: Vahagn Sargis Abgaryan
Born: 18 June 1989, Ashtarak, Armenia
Nationality: Armenian
Marital status: Single
Home Address: Sari-Tagh 14 St., apt.13, 0017 Yerevan, Armenia
Phone: +374-93-65-19-29 (mobile phone, Armenia);
+7-905-758-42-78 (mobile phone, Russian Federation)
+374-57-73-79 (home, Armenia)
E-mail: vahagnab@googlemail.com

Education:

2011 to 2014: PhD student, University Center of Joint Institute of Nuclear Research, Dubna, Russian Federation. Thesis defense in March of 2016.
2009 to 2011: Master Degree student, Department of Physics, Yerevan State University, Chair of Theoretical Physics.
2009 : BS student, Department of Physics, Yerevan State University, Chair of Theoretical Physics (graduated with honor)
2005: Graduated from physical- mathematical high school name of Artashes Shahinyan

Specialization:

Main fields, current research and key words: Quantum Information Theory, Geometry of Quantum State Spaces, Quantum Mechanics and Mathematical Physics, Quantum Entanglement , Quantum Phase Transitions, Quantum Mechanics on Phase space, Statistical Physics, Spin Lattice Models.

Skills:

Programming languages: Wolfram Mathematica, C++, Visual C++ (using Microsoft Visual Studio 6.0), LabView, familiar with Pascal.

Language skills: Armenian (native)

Russian (fluent)

English (fluent)

Employment:

2023 Dubna state university: associate professor.

2016-2022 Laboratory of Information Technologies, Group of Quantum and Algebraic Computations.

2020 RUDN University, Russia.

2019 (June-September) Czech Technical University in Prague faculty of Nuclear Sciences and Physical Engineering, Short term post. doc. position.

2011to 2016 junior scientific worker at “Bogolyubov Laboratory of Theoretical Physics, Joint Institute for Nuclear Research”, Dubna, Russian Federation.

From 01.02.2010 to 31.01.2011: senior laboratory assistant at “Bogolyubov Laboratory of Theoretical Physics, Joint Institute for Nuclear Research”, Dubna, Russian Federation.

2010 to 2011: senior laboratory assistant at “A.I. Alikhanyan National Science Laboratory” (former “Yerevan Physics Institute”).

Teaching experience: Quantum Information Theory and Quantum Computing, Quantum Cryptography, Additional chapters of quantum mechanics.

List of Publications

1. V. Abgaryan et. al. *Status and initial physics performance studies of the MPD*, Eur.Phys.J. A, 58, 140-189, 2022.

2. A. Ayriyan, D. Blaschke, A. G. Grunfeld, D. Alvarez-Castillo, H. Grigorian, V. Abgaryan, Bayesian analysis of multimessenger M-R data with interpolated hybrid EoS, *The European Physical Journal A*, **57**, 318, 2022.
3. V. Abgaryan, A. Khvedelidze, *Symmetry*, “On the family of Wigner functions for N -level quantum system” ISSN:2073-8994, Изд:MDPI, **13**, 2021.
4. V. Abgaryan, A. Khvedelidze, I. Rogojin *On overall measure of non-classicality of N -level quantum system and its universality in the large N limit*, *Lecture Notes in Computer Science. Lecture Notes in Computer Science*, ISSN:0302-9743, Изд:Springer, **12563**, 244-255, 2021
5. V. Abgaryan, A. Khvedelidze, A. Torosyan, “Kenfack–Zyczkowski indicator of nonclassicality for two non-equivalent representations of Wigner function of qutrit”, *Physics Letters A*, ISSN:0375-9601, eISSN:1873-2429, 2021
6. N. Abbasli, V. Abgaryan, M. Bures, A. Khvedelidze, I. Rogojin and A. Torosyan, *On Measures of Classicality/Quantumness in Quasiprobability Representations of Finite-Dimensional Quantum Systems*, *Physics of Particles and Nuclei*, **51-4**, 443-447, 2020.
7. V. Abgaryan, A. Khvedelidze, A. Torosyan, *The Global Indicator of Classicality of an Arbitrary N -Level Quantum System*, *Journal of Mathematical Sciences*, **251-3**, 301-314, 2020
8. V. Abgaryan, A. Khvedelidze, A. Torosyan, *On the Moduli Space of Wigner Quasiprobability Distributions for N -Dimensional Quantum Systems*, *Journal of Mathematical Sciences*, **240-5**, 617-633, 2019
9. V. Abgaryan, N. Ananikian, L. Ananikyan, H. Poghosyan, “Magnetic Properties and Entanglement of Nickel Containing Polymer Preprint”: *Armenian Journal of Physics*, 2019, vol. 12, issue 3, pp. 261-272.
10. V. Abgaryan, D. Alvarez-Castillo, A. Ayriyan, D. Blaschke and H. Grigorian, *Two Novel Approaches to the Hadron-Quark Mixed Phase in Compact Stars*, *Universe*, **4-9**, 94, 2018
11. V. Abgaryan, N.S. Ananikian, L. Ananikyan, V. Hovhannisyan, *Quantum transitions, magnetization and thermal entanglement of the spin-1 Ising–Heisenberg diamond chain*, *Solid State Communications*, **224**, 15-20, 2015
12. V. Abgaryan, N.S. Ananikian, L. Ananikyan, V. Hovhannisyan, *Entanglement, magnetic and quadrupole moments properties of the mixed spin Ising–Heisenberg diamond chain*, *Solid State Communications*, **203**, 5-9, 2015
13. V.S. Abgaryan “Quantum entanglement and quantum phase transitions in anisotropic two- and three-particle spin-1 Heisenberg clusters” *Journal of Contemporary Physics*, **49**, 6, 249, (2014)
14. V.S. Abgaryan, N.S. Ananikian, L. Ananikyan, A. Kocharian, “Phase transitions and entanglement properties in spin-1 Heisenberg clusters with single-ion anisotropy”, *Physica Scripta* **83**, 5, (2011).