

# Vardan Frants Manukyan

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## Research Institute of Physics

Laboratory of Theoretical Physics

Senior researcher

## Education

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<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Physics
<b>Date</b>	1989 - 1991
<b>Degree name</b>	Qualified specialist

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## Scientific Rank/degree

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<b>Institution</b>	SCC
<b>Date</b>	2014
<b>Degree name</b>	Associate professor
<b>Specialty</b>	Physico-mathematical sciences

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<b>Institution</b>	Institute of Mechanics and Yerevan State University
<b>Date</b>	1998
<b>Degree name</b>	Candidate
<b>Specialty</b>	Physico-mathematical sciences
<b>Scientific Supervisor</b>	Belubekyan Mels
<b>Research Topic</b>	The influence of moment stresses and a layered structure on the propagation of localized shear waves

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## Language skills

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Հայերեն English Русский

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## Work experience

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<b>Institution</b>	Yerevan State University
<b>Period of time</b>	2022 till now
<b>Rank/degree</b>	Senior researcher

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## Publications

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Article

**Finite temperature fermionic charge and current densities in conical space with a circular edge**

A. A. Saharian, V.F. Manukyan, T.A. Petrosyan

Physical Review D 2025 065006

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*Article*

**Determining the centres of mass of a circular arc and a circular sector using the principle of virtual work**

Vardan Manukyan, Gagik Nikoghosyan

Physics Education 2023 045004

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*Article*

**Electromagnetic vacuum stresses and energy fluxes induced by a cosmic string in de Sitter spacetime**

A.A. Saharyan, V.F. Manukyan, V. Kh. Kotanjyan, A. A. Grigoryan

International Journal of Modern Physics D 2023 2350042

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*Article*

**Fano resonance model for the processes of photoionization of two-well heterostructures in a transverse electric field**

G. Nikoghosyan, H. S. Nikoghosyan, V. F. Manukyan, S. L. Harutyunyan

Physica E: Low-dimensional Systems and Nanostructures 2021 114587

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*Article*

**Non-Monotone Dispersion of Carriers in Size-Quantized Nanostructures with Violated Symmetries**

G. H. Nikoghosyan, H. S. Nikoghosyan, S. L. Harutyunyan, V. F. Manukyan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2020 345 - 353

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*Article*

**Effect of Self-Induced Transparency in a Massive of Spherical Quantum Dots Under the Conditions of Strong Dimensional Quantization**

G. H. Nikoghosyan, H. S. Nikoghosyan, V. F. Manukyan, S. L. Harutyunyan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2019 272-281

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*Article*

**Quantum Model of a Trapezoidal Limiting Potential Profile in a Spherical Nanocrystal**

G. H. Nikoghosyan, H. S. Nikoghosyan, S. L. Harutyunyan, V. F. Manukyan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2019 345-350

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*Article*

**Coherent bleaching of the medium with Raman scattering under conditions of strong size quantization**

G. H. Nikoghosyan, H. S. Nikoghosyan, S. L. Harutyunyan, V. F. Manukyan

Physica B: Condensed Matter 2019 411710

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*Article*

**The phenomenon of nonstationary nutation in the system of two-level quantum wells of a periodic superlattice with strong magnetic quantization**

G. H. Nikoghosyan, H. S. Nikoghosyan, V F Manukyan

*Article*

**Electromagnetic vacuum densities induced by a cosmic string**

A. A. Saharian, V. F. Manukyan, N. A. Saharyan

Particles 2018 175-193

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*Article*

**Electromagnetic vacuum fluctuations around a cosmic string in de Sitter spacetime**

A. A. Saharian, V. F. Manukyan, N. A. Saharyan

European Physical Journal C 2017 478, 13

<http://link.springer.com/journal/10052>

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*Article*

**Electromagnetic Casimir densities for a cylindrical shell on de Sitter space**

A.A. Saharian, V.F. Manukyan, N.A. Saharyan

International Journal of Modern Physics A 2016 1650183-29

<http://www.worldscientific.com/worldscinet/ijmpa>

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*Article*

**Scalar Casimir densities induced by a cylindrical shell in de Sitter spacetime**

A. A. Saharian, V. F. Manukyan

Classical and Quantum Gravity 2015 025009,23

<http://iopscience.iop.org/journal/0264-9381>

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*Conference*

**Electromagnetic Casimir densities for a cylindrical boundary in de Sitter spacetime**

V. F. Manukyan, A. A. Saharian

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