

Tigran Ara Petrosyan

Research Institute of Physics

Laboratory of Theoretical Physics

Researcher

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Education

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|--------------------|---|
| Institution | Yerevan State University |
| Faculty | Department of Physics, Academician G. Sahakyan's Chair of Theoretical Physics |
| Date | 2019 - 2022 |
| Degree name | PhD student |

Scientific Rank/degree

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|------------------------------|---|
| Institution | Yerevan State University |
| Date | 2022 |
| Degree name | Candidate |
| Specialty | Physico-mathematical sciences |
| Scientific Supervisor | Aram Saharian |
| Research Topic | Some quantum effects in cosmological models |

Language skills

English Русский

Work experience

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|-----------------------|--------------------------|
| Institution | Yerevan State University |
| Period of time | 2023 till now |
| Rank/degree | Scientific Researcher |

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|-----------------------|--------------------------|
| Institution | Yerevan State University |
| Period of time | 2021 - 2023 |
| Rank/degree | Junior Researcher |

Scientific interests

- Cosmology, quantum field theory in curved spacetime

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

Article

Topological Casimir effect for fermionic condensate in AdS spacetime with compact dimensions

T.A. Petrosyan, A.A. Grigoryan, A.A. Saharian

Europhysics Letters 2025 64001

Manual

Տեսական մեխանիկայի խնդիրների ժողովածու

Ռոլանդ Ավագյան, Արամ Սահարյան, Տիգրան Պետրոսյան

2024 244

Article

Plane symmetric gravitational fields in (D+1)-dimensional General Relativity

R.M. Avagyan, T.A. Petrosyan, A.A. Saharian, G.H. Harutyunyan

Астрофизика (Astrophysics) 2024 405 - 419

Article

Mean field squared and energy-momentum tensor for the hyperbolic vacuum in dS spacetime

A. A. Saharian, T. A. Petrosyan, V. S. Torosyan

Annals of Physics 2022 168728

Article

Cosmological Evolution With Negative Energy Densities

A.A. SAHARIAN, R.M. AVAGYAN, E.R. BEZERRA DE MELLO, V.KH. KOTANJYAN, T.A. PETROSYAN,

H.G. BABUJYAN

Astrophysics 2022 427-440

Article

Casimir Effect for Fermion Condensate in Conical Rings

Aram Saharian, Tigran Petrosyan, Arshak Hovhannisyan

UNIVERSE 2021 73 (1-20)

Article

Casimir densities induced by a sphere in the hyperbolic vacuum of de Sitter spacetime

A. A. Saharian, T. A. Petrosyan

Physical Review D 2021 065017

Article

Fermionic condensate in de Sitter spacetime

A. A. Saharian, E. R. Bezerra de Mello, A. S. Kotanjyan, T. A. Petrosyan

Astrophysics 2021 529-543

Article

Polarization of the Conformal Vacuum in the Milne Universe

T.A. Petrosyan

Armenian Journal of Physics 2021 180-190

Article

The Casimir densities for a sphere in the Milne universe

Aram A. Saharian, Tigran A. Petrosyan

Symmetry 2020 619(1-30)

Article

Scalar Field Modes in de Sitter Spacetime with Negative Curvature Spatial Foliation

A.A. Saharian, T.A. Petrosyan, S.S. Chitchyan, A.Kh. Grigoryan

Armenian Journal of Physics 2020 316-329

Article

Angular distribution of high power radiation from a charge rotating around a dielectric ball

T.A. Petrosyan, L.Sh. Grigoryan, A.A. Saharian, H.F. Khachatryan, M.L. Grigoryan, A.V. Sargsyan

Journal of Instrumentation 2020 C04035

Article

Angular Distribution of Intensive Radiation from a Charge Rotating Around a Conductive Ball

L.Sh. Grigoryan, A.A. Saharian, A.H. Mkrtchyan, H.F. Khachatryan, M.L. Grigoryan, T.A. Petrosyan,

H.P. Harutyunyan

Armenian Journal of Physics 2020 105 -113

Article

Vacuum fluxes from a brane in de Sitter spacetime with compact dimensions

A.A. Saharian, D.H. Simonyan, T.A. Petrosyan

Armenian Journal of Physics 2019 51-61

Article

BOUNDARY INDUCED QUANTUM EFFECTS IN LINEARLY EXPANDING COSMOLOGICAL MODELS

Petrosyan Tigran

Collection of scientific articles of YSU SSS 2019 231-243

Article

Scalar Casimir effect in a linearly expanding universe

A. A. Saharian, T. A. Petrosyan, S. V. Abajyan, B. B. Nersisyan

International Journal of Geometric Methods in Modern Physics 2018 1850177(1-26)

Conference

On the Features of Radiation from a Charge Rotating Around Dielectric and Conductive Ball

L.Sh. Grigoryan, A.A. Saharian, H.F. Khachatryan, M.L. Grigoryan, A.V. Sargsyan, T.A. Petrosyan
