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🌐 Language skills

Հայերեն Русский English

📖 Publications

Article

Observation of coherent Cherenkov radiation of electron bunches from a partially dielectric loaded waveguide

L.Sh. Grigoryan, A.P. Potylitsyn, M.V. Shevelev, A.V. Vukolov, P.V. Karataev, S.B. Dabagov, A.S. Vardanyan, A.S. Yeremyan, M.M. Sukiasyan, A.A. Saharian, V.R. Kocharyan, T.R. Muradyan, M.L. Grigoryan, D.E. Baghdasaryan, V.Kh. Kotanjyan, A.V. Sargsyan, H.P. Harutyunyan, H.F. Khachatryan, A.R. Mnatsakanyan, A.H. Mkrtchyan

Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment
2024 169177

Article

Spectral-angular distribution of radiation generated by a train of electron bunches passing through the centre of a ball

L. Sh. Grigoryan, A. H. Mkrtchyan, P. A. Aleksandrov, A. A. Saharian, W. Wagner, M. L. Grigoryan, J. P. Markosyan, A. V. Sargsyan, A. V. Martirosyan, H. F. Khachatryan

Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment
2024 168991

Article

Vacuum currents for a scalar field in models with compact dimensions

Aram A. Saharian
Symmetry 2024 92

Article

Quasidiscrete spectrum Cherenkov radiation by a charge moving inside a dielectric waveguide

A. A. Saharian, S. B. Dabagov, H. F. Khachatryan, L. Sh. Grigoryan
Journal of Instrumentation 2024 C06017

Manual

Տեսական մեխանիկայի խնդիրների ժողովածու

Ռուսերեն Ավագյան, Արամ Սահարյան, Տիգրան Պետրոսյան
2024 244

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

Article

Surface-polariton excitation and energy losses by a charged particle in cylindrical waveguides

A.A. Saharian, L.Sh. Grigoryan, A.S. Kotanjyan, H.F. Khachatryan

Physical Review A 2023 063513

Article

Fermionic condensate and the mean energy-momentum tensor in the Fulling-Rindler vacuum

S. Bellucci, V.Kh. Kotanjyan, A.A. Saharian

Physical Review D 2023 085014

Article

Motion of a Particle in the Field of an Infinite Flat Slab

R.M. Avagyan, A.A. Saharian, S.S. Jibilyan

Astrophysics 2023 411-422

Article

Radiation processes on acoustic superlattices

A.A. Saharian, L. Sh. Grigoryan, H. F. Khachatryan, V. V. Parazian

Journal of Physics: Conference Series 2023 012017

Article

On investigations of radiation processes in media under external influences conducted at the IAPP

L. Sh. Grigoryan, A. A. Saharian, M. L. Grigoryan, V. Kh. Kotanjyan, H. F. Khachatryan

Journal of Physics: Conference Series 2023 012012

Article

Helical vacuum currents for a scalar field in models with nontrivial spatial topology

A. A. Saharian, D. H. Simonyan, H. H. Mikayelyan, A. A. Vantsyan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2023 341-348

Article

Surface Casimir densities on branes orthogonal to the boundary of anti-de Sitter spacetime

Aram Saharian

Physics (Switzerland) 2023 1145-1162

Article

Topological Effects in a Fermionic Condensate Induced by a Cosmic String and Compactification on the AdS Bulk

Stefano Bellucci, Wagner Oliveira dos Santos, Eugenio R. Bezerra de Mello, Aram A. Saharian

Symmetry 2022 584

Article

Fermionic vacuum polarization around a cosmic string in compactified AdS spacetime

S. Bellucci, E. R. Bezerra de Mello, W. Oliveira dos Santos, A. A. Saharian

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Article

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

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

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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

Vacuum currents in partially compactified Rindler spacetime with an application to cylindrical black holes

V. Kh. Kotanjyan, A. A. Saharian, M. R. Setare

Nuclear Physics B 2022 115838

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Cosmic string and brane induced effects on the fermionic vacuum in AdS spacetime

S. Bellucci, W. Oliveira dos Santos, E. R. Bezerra de Mello, A. A. Saharian

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Article

Vacuum densities and the Casimir forces for branes orthogonal to the AdS boundary

S. Bellucci, A. A. Saharian, V. Kh. Kotanjyan

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Radiation of surface polaritons in cylindrical waveguides

A. A. Saharian, L. Sh. Grigoryan, H. F. Khachatryan, A. S. Kotanjyan

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Finite temperature charge and current densities around a cosmic string in AdS spacetime with compact dimension

E. R. Bezerra de Mello, W. Oliveira dos Santos, A. A. Saharian

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Article

Casimir Effect for Fermion Condensate in Conical Rings

Aram Saharian, Tigran Petrosyan, Arshak Hovhannisyan

UNIVERSE 2021 73 (1-20)

Article

FLAP Collaboration: Tasks and Perspectives. Study of Fundamentals and New Applications of Controllable Generation of Electromagnetic Radiation by Relativistic Electrons Using

Functional Materials

L. Aloyan, A. Avetisyan, Y. Dalyan, L. Grigoryan, N. Karapetyan, V. Kocharyan, A. Mkrtchyan, A. Movsisyan, A. Saharian, A. Shahbazyan, A. Baldin, 37
Physics of Particles and Nuclei Letters 2021 338-353

Article

Vacuum fermionic currents in braneworld models on AdS bulk with a cosmic string

A. A. Saharian, S. Bellucci, W. Oliveira dos Santos, E. R. Bezerra de Mello

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Article

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

A. A. Saharian, T. A. Petrosyan

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The Holographic cosmology with axion field

A. A. Saharian, A. V. Timoshkin

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Dynamics of a cosmological model with a conformally-coupled scalar field

R. M. Avagyan, G. H. Harutunyan, A. S. Kotanjyan, A. V. Hovsepyan, A. A. Saharian

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Fermionic condensate in de Sitter spacetime

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

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Article

Fermionic vacuum currents in topologically nontrivial braneworlds: Two-brane geometry

S. Bellucci, A. A. Saharian, H. G. Sargsyan, V. V. Vardanyan

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Article

The Casimir effect for fermionic currents in conical rings with applications to graphene ribbons

S. Bellucci, I. Brevik, A. A. Saharian, H. G. Sargsyan

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Article

Electromagnetic Casimir densities for planar boundaries in AdS spacetime

A. A. Saharian, A. S. Kotanjyan, A. A. Saharyan, H. G. Sargsyan

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Synchrotron radiation from a charge circulating around a cylinder with negative permittivity

A.A. Saharian, A.S. Kotanjyan, L.Sh. Grigoryan, H.F. Khachatryan, V.Kh. Kotanjyan

Article

The Casimir densities for a sphere in the Milne universe

Aram A. Saharian, Tigran A. Petrosyan

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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

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Article

Quantum vacuum effects in braneworlds on AdS bulk

Aram A. Saharian

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Article

Electromagnetic field correlators and the Casimir effect for planar boundaries in AdS spacetime with application in braneworlds

A. A. Saharian, A. S. Kotanjyan, H. G. Sargsyan

Physical Review D 2020 105014

Article

Cherenkov radiation and emission of surface polaritons from charges moving paraxially outside a dielectric cylindrical waveguide

A. A. Saharian, L. Sh. Grigoryan, A. Kh. Grigorian, H.F. Khachatryan, A.S. Kotanjyan

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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

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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

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Article

ИНДУЦИРОВАННАЯ ГРАНИЦЕЙ ПОЛЯРИЗАЦИЯ ВАКУУМА В ПРОСТРАНСТВЕ ДЕ СИТТЕРА С КОМПАКТНЫМИ ИЗМЕРЕНИЯМИ

А.С. КОТАНДЖЯН, А.А. СААРЯН, Д.А. СИМОНЯН

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2019 3-15

Article

СИНХРОТРОННОЕ ИЗЛУЧЕНИЕ ЗАРЯДА НА СОБСТВЕННЫХ МОДАХ ДИЭЛЕКТРИЧЕСКОГО ЦИЛИНДРА

А. С. Котанджян, А. А. Саарян, В. Х. Котанджян

Article

Generation of surface polaritons in dielectric cylindrical waveguides

A. S. Kotanjyan, A. R. Mkrtchyan, A. A. Saharian, V. Kh. Kotanjyan

Physical Review Special Topics-Accelerators and Beams 2019 040701(1-10)

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

Transition radiation on a superlattice in finite thickness plate generated by two acoustic waves

A. R. Mkrtchyan, V. V. Parazian, A. A. Saharian

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Article

Radiation of surface waves from a charge rotating around a dielectric cylinder

A. S. Kotanjyan, A. R. Mkrtchyan, A. A. Saharian, V. Kh. Kotanjyan

Journal of Instrumentation 2018 C01016(1-6)

Article

Scalar Casimir densities and forces for parallel plates in cosmic string spacetime

E. R. Bezerra de Mello, A. A. Saharian, S. V. Abajyan

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Induced cosmological constant in brane models with a compact dimension

A. A. Saharian, H. G. Sargsyan

Astrophysics 2018 375-390

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Electromagnetic vacuum densities induced by a cosmic string

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

Particles 2018 175-193

Article

Models of Compact Stars in the Bimetric Scalar-Tensor Theory of Gravitation

Levon Sh. Grigorian, Hrant F. Khachatryan, Aram A. Saharian

Particles 2018 203-211

Article

Fermionic currents in topologically nontrivial braneworlds

S. Bellucci, A. A. Saharian, D. H. Simonyan, V. V. Vardanyan

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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)

Article

Induced Cosmological Constant in Braneworlds with Compact Dimensions

A. A. Saharian, H. G. Sargsyan

Communications of the Byurakan Astrophysical Observatory 2018 315-326

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Qualitative Analysis of Cosmological Models in $f(R)$ -Gravity

R. M. Avagyan, E. V. Chubaryan, G. H. Harutyunyan, A. A. Saharian

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Superdense Stellar Configurations in the Bimetric Scalar-Tensor Theory of Gravity

L. Sh. Grigorian, H. F. Khachatryan, A. A. Saharian

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The Casimir effect for parallel plates in Friedmann-Robertson-Walker universe

E.R. Bezerra de Mello, A.A. Saharian, M.R. Setare

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A.Kh. Grigoryan, A.R. Mkrtchyan, A.A. Saharian

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Electromagnetic Quantum Effects in Anti-De Sitter Spacetime

A. S. Kotanjyan, A. A. Saharian

Physics of Atomic Nuclei 2017 562-571

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Article

Synchrotron and Smith-Purcell radiations from a charge rotating around a cylindrical grating

A.A. Saharian, A.S. Kotanjyan, A.R. Mkrtchyan, B.V. Khachatryan

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS
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A.S. Kotanjyan, A.R. Mkrtchyan, A.A. Saharian

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Electromagnetic vacuum fluctuations around a cosmic string in de Sitter spacetime

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

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Саарян, А. А., Котанджян, А. С., Варданын, Т. С.

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Fermionic currents in AdS spacetime with compact dimensions

S. Bellucci, A. A. Saharian, V. Vardanyan

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Anna S. Kotanjyan, Aram A. Saharian, Astghik A. Saharyan

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Casimir forces in models with non-trivial topology

T. Sh. Navasardyan, A. A. Saharian

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Vacuum Densities for a Charged Scalar Field in de Sitter Space-Time with Compact Dimensions

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General Relativity and Gravitation 2016 1-21

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Casimir effect in hemisphere capped tubes

E. R. Bezerra de Mello, A. A. Saharian

International Journal of Theoretical Physics 2016 1167-1191

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Induced fermionic current by a magnetic flux in a cosmic string spacetime at finite temperature

E. R. Bezerra de Mello, A. A. Saharian, A. Mohammadi

International Journal of Modern Physics A 2016 1641021,10

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A. R. Mkrtchyan, A. P. Potylitsyn, V. R. Kocharyan, A. A. Saharian

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Article

Finite temperature fermion condensate, charge and current densities in a (2+1)-dimensional conical space

S. Bellucci, E. R. Bezerra de Mello, E. Braganca, A. A. Saharian

European Physical Journal C 2016 76-350

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Hadamard function and the vacuum currents in braneworlds with compact dimensions: Two-branes geometry

S. Bellucci, A. A. Saharian, V. Vardanyan

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Radiation from a longitudinal oscillator moving along a circular trajectory

A S Kotanjyan, A A Saharian

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The study of undulator radiation of transversal oscillator

A S Kotanjyan, A A Saharian

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Quantum effects in anti-de Sitter spacetime for the electromagnetic vacuum

A. S. Kotanjyan, A. A. Saharian, H. G. Sargsyan, D. H. Simonyan

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ELECTROMAGNETIC CASIMIR DENSITIES FOR A PLATE IN ANTI-DE SITTER SPACETIME

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Induced fermionic charge and current densities in two-dimensional rings

S. Bellucci, A.A. Saharian, A.Kh. Grigoryan

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Electromagnetic Casimir densities for a cylindrical shell on de Sitter space

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

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A. S. Kotanjyan, A. A. Saharian, H. A. Nersisyan

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A. A. Saharian, V. F. Manukyan

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A. Mohammadi, E. R. Bezerra de Mello, A. A. Saharian

Classical and Quantum Gravity 2015 135002,25

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Induced vacuum currents in anti-de Sitter space with toral dimensions

E. R. Bezerra de Mello, A. A. Saharian, V. Vardanyan

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Vacuum currents induced by a magnetic flux around a cosmic string with finite core

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Finite temperature fermionic charge and current densities induced by a cosmic string with magnetic flux

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Casimir effect for scalar current densities in topologically nontrivial spaces

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Conference

Quantum effects in anti-de Sitter spacetime for electromagnetic vacuum state

KOTANJYAN Anna, Prof. SAHARIAN Aram, Mr. SARGSYAN Hayk, Mr. SIMONYAN David

Conference

Electromagnetic Casimir densities for a cylindrical boundary in de Sitter spacetime

V. F. Manukyan, A. A. Saharian

Conference

Electromagnetic quantum effects in anti-de Sitter spacetime

A.S. Kotanjyan, A.A. Saharian

Conference

The Synchrotron Radiation of the Transversal Oscillator

A. Kotanjyan, A. Saharian

Conference

On a possible interference of synchrotron and Smith-Purcell radiation

A.R. Mkrtvhyan, B.V. Khachatryan, A.A. Saharian, A. S. Kotanjyan

Conference

The study of undulator radiation of transversal oscillator

Anna Kotanjyan, Aram Saharian

Conference

Synchrotron radiation from a relativistic charged particle rotating around a cylindrical diffraction grating

Anna Kotanjyan, A. Saharian, B. Khachatryan

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
