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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

Fermionic vacuum stresses in models with toroidal compact dimensions

A. A. Saharian, R. M. Avagyan, G. H. Harutyunyan, G. H. Nikoghosyan

Астрофизика (Astrophysics) 2024 231-245

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

Journal of Cosmology and Astroparticle Physics 2022 010

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

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

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

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Article

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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Article

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

Physical Review D 2022 125009

Article

Casimir Effect for Fermion Condensate in Conical Rings

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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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
International Journal of Geometric Methods in Modern Physics 2021 2150174

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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. Hovsepian, 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
Astrophysics 2021 529-543

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

S. Bellucci, A. A. Saharian, H. G. Sargsyan, V. V. Vardanyan
Physical Review D 2020 045020(1-23)

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
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The Casimir densities for a sphere in the Milne universe
Aram A. Saharian, Tigran A. Petrosyan
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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

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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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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
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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

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

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2019 151-159

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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

Journal of Instrumentation 2018 C01032(1-7)

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

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

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Article

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

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

Physical Review D 2018 085023(1-22)

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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

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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)

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Induced Cosmological Constant in Braneworlds with Compact Dimensions

A. A. Saharian, H. G. Sargsyan

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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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Fermionic condensate and the Casimir effect in cosmic string spacetime

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

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

Article

Electromagnetic Quantum Effects in Anti-De Sitter Spacetime

A. S. Kotanjyan, A. A. Saharian

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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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Radiation from a charge rotating inside a cylindrical grating

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., Врданян, Т. С.

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2017
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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

E. V. Chubaryan, A. S. Kotanjyan, A. A. Saharian, D. H. Simonyan

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Qualitative evolution in f(R) cosmologies

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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

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

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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

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Article

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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A S Kotanjyan, A A Saharian

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

A. A. Saharian, A. S. Kotanjyan, A. A. Saharyan

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

A. A. Saharian, V. F. Manukyan

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Article

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

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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

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

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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
