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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

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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

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

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

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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
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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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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

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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
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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
Journal of High Energy Physics 2022 021

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

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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 Hovhannisyán

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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

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

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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. 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

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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

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

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

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Article

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

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Quantum vacuum effects in braneworlds on AdS bulk

Aram A. Saharian

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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

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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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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

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

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Generation of surface polaritons in dielectric cylindrical waveguides

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

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Article

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

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

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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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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

Article

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

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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

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Induced Cosmological Constant in Braneworlds with Compact Dimensions

A. A. Saharian, H. G. Sargsyan

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

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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. Mkrtychyan, A.A. Saharian

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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

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

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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

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

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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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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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Electromagnetic Casimir densities for a cylindrical shell on de Sitter space

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Casimir effect for scalar current densities in topologically nontrivial spaces

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Wightman function and the Casimir effect for a Robin sphere in a constant curvature space

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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
