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🌐 Language skills

Հայերեն Русский English

📖 Publications

Article

Semi-Circular Parabolic System on Two-Dimensional Hyperboloid

G.S. Pogosyan, A.Yakhno

Physics of Particles and Nuclei 2024 667-671

Article

Geometric Collective Model of Atomic Nuclei: Finite Element Method Implementations

G. S. Pogosyan, A. A. Gusev, G. Chuluunbaatar, S. I. Vinitsky, A. Deveikis, P. O. Hess, L. L. Hai

Physics of Particles and Nuclei 2023 1011-1017

Article

Quantum Systems with Hidden Symmetry. Interbasis Expansions

L.G. Mardoyan, G.S. Pogosyan, A.N. Sissakian, V.M. Ter-Antonyan

arXiv.org 2023 1-210

Article

Separations of Variables and Analytic Contractions on Two-Dimensional Hyperboloids

G. S. Pogosyan, A. Yakhno

Physics of Particles and Nuclei 2019 87-140

Article

On elliptic trigonometric form of the Zernike system and polar limits

Natig M Atakishiyev, George S Pogosyan, Kurt Bernardo Wolf, Alexander Yakhno

Physica Scripta 2019 045202 (1-13)

Article

Spherical geometry, Zernike's separability, and interbasis expansion coefficients

George S. Pogosyan, Natig M. Atakishiyev, Kurt Bernardo Wolf, Alexander Yakhno

Journal of Mathematical Physics 2019 101701

Article

Elliptic basis for the Zernike system: Heun function solutions

George S. Pogosyan, Natig M. Atakishiyev, Kurt Bernardo Wolf, Alexander Yakhno

Journal of Mathematical Physics 2018 073503(1-15)

Article

Superintegrable classical Zernike system

G.S.Poghosyan, K.B.Wolf, A.Yakhno

Journal of Mathematical Physics 2017 072901-22

<http://scitation.aip.org/content/aip/journal/jmp>

*Article***Quantum superintegrable Zernike system**

G.S.Poghosyan, K.B.Wolf, A.Yakhno, C.Salto-Alegre

Journal of Mathematical Physics 2017 072101-21

<http://scitation.aip.org/content/aip/journal/jmp>

*Article***Eigenfunction expansions in the imaginary Lobachevsky space**

G.S.Poghosyan, Yu.A.Kurochkin, V.S.Otchik, D.R.Petrosian

Physics of Atomic Nuclei 2017 730-738

<http://link.springer.com/journal/11450>

*Article***Kepler motion on single-sheet hyperboloid**

G.S.Poghosyan, Yu.Kurochkin, V.S.Otchik, L.Mardoyan, D.R.Petrosyan

Physics of Atomic Nuclei 2017 739-746

<http://link.springer.com/journal/11450>

*Article***New separated polynomial solutions to the Zernike system on the unit disk and interbasis expansion**

George S. Pogosyan, Kurt Bernardo Wolf, Alexander Yakhno

JOURNAL OF THE OPTICAL SOCIETY OF AMERICA A-OPTICS IMAGE SCIENCE AND VISION 2017 1844-1848

*Article***Interbasis expansions in the Zernike system**

George S. Pogosyan, Natig M. Atakishiyev, Kurt Bernardo Wolf, Alexander Yakhno

Journal of Mathematical Physics 2017 103505(1-20)

*Article***Harmonic Oscillator on the $SO(2; 2)$ Hyperboloid**

George Pogosyan, David Petrosyan

Symmetry Integrability and Geometry-Methods and Applications 2015 096

<http://www.emis.de/journals/SIGMA/>

*Article***Quantum Oscillator Problem on $SO(2, 2)$ Hyperboloid**

G.S.Pogosyan., D.R.Petrosyan

Nonlinear Phenomena in Complex Systems 2014 405 - 408

*Article***Relation of the oscillator and Coulomb systems on spheres and pseudospheres**

Armen Nersessian, George Pogosyan

Physical Review A 2001 020103(R) , 5 pa

<http://journals.aps.org/prb/>

Article

Hidden symmetry, separation of variables and interbasis expansions in the two-dimensional hydrogen atom

L G Mardoyan, G S Pogosyan, A N Sissakian, V M Ter-Antonyan

Journal of Physics A: Mathematical and General (Journal of Physics A-Mathematical and Theoretical) 1985
021/ 455-466

Article

Spheroidal analysis of the hydrogen atom

L G Mardoyan, G S Pogosyan, A N Sissakian, V M Ter-Antonyan

Journal of Physics A: Mathematical and General (Journal of Physics A-Mathematical and Theoretical) 1983
010/ 711-728

Conference

Zernike System Stems from Free Motion on the 3-Sphere

George S. Pogosyan, Kurt Bernardo Wolf, Natig M. Atakishiyev, Alexander Yakhno

Conference

The Superintegrable Zernike System

George S. Pogosyan, Natig M. Atakishiyev, Cristina Salto-Alegre, Kurt Bernardo Wolf, Alexander Yakhno

Conference

Symbolic-Numeric Algorithm for Computing Orthonormal Basis of $O(5) \times SU(1,1)$ Group

George S. Pogosyan, Algirdas Deveikis, Alexander A. Gusev, Vladimir P. Gerdt, Sergue I. Vinitsky,

Andrzej Gozdz, Aleksandra Pedrak, Cestmir Burdik
