

ISSN: 2380-4327 Volume 10, Number 2, April 2024



Journal of High Energy Physics, Gravitation and Cosmology



<https://www.scirp.org/journal/jhepgc>

Journal Editorial Board

ISSN 2380-4327 (Print) ISSN 2380-4335 (Online)

<https://www.scirp.org/journal/jhepgc>

Editor-in-Chief

Prof. Christian Corda

Section of Physics of Santa Rita, School of Advanced
Academic Studies and Research, Italy

Editorial Board

Prof. Mohamed Assaad Abdel-Raouf

Physics Department, Faculty of Science, Ain Shams University, Egypt
Fukushima University, Japan

Dr. Kazuharu Bamba

Dr. Andrew Beckwith

Department of Physics, PRC (Visiting Scholar) Chongqing University,
USA

Prof. Elmo Benedetto

Dr. Alexander Burinskii

Department of Computer Science, University of Salerno, Italy
Laboratory of Theoretical Physics in Nuclear Safety, Institute of the
Russian Academy of Sciences, Russia

Prof. Farhad Darabi

Prof. Octavio José Obregón Díaz

Dr. Luca Fabbri

Dr. Maria Emília Xavier Guimarães

Dr. Seyed Hossein Hendi

Dr. Huda E. Khalid

Prof. Maria Paola Lombardo

Dr. Lino Miramonti

Dr. Hooman Moradpour

Azərbaycan Şahid Mədanı University, Iran

Universidad de Guanajuato, Mexico

University of Bologna, Italy

Instituto de Física, Universidade Federal Fluminense, Brazil

Shiraz University, Iran

Mosul University, Iraq

Istituto Nazionale di Fisica Nucleare, Italy

Università degli Studi di Milano, Italy

Research Institute for Astronomy and Astrophysics of Maragha
(RIAAM), Iran

Prof. Jean Perron

Department of Applied Sciences (DSA), University of Québec in
Chicoutimi, Canada

Prof. Christopher Pilot

Prof. Waldyr A. Rodrigues Jr.

Gonzaga University, Spokane, WA, USA

Institute of Mathematics, Statistics and Scientific Computation, State
University of Campinas (UNICAMP), Brazil

Prof. Matteo Luca Ruggiero

Prof. Jafar Sadeghi

Dr. Burra Gautam Sidharth

DISAT, Polytechnic University of Turin, Italy

University of Mazandaran, Iran

International Institute of Applicable Mathematics & Information
Sciences B.M. Birla Science Centre, India

Dr. Anirvan Sircar

Dr. Lorenzo Zaninetti

Intel Corporation, USA

Department of Physics, Italy

Table of Contents

Volume 10 Number 2

April 2024

The Substructure of Elementary Particles Demonstrated by the I-Theory

H. H. S. Isa, C. Dumas 469

Unification of Gravitational and Strong Interaction Fields Using Partial Gauge Symmetry

Y. H. Yun, K. Jang 515

Gravitation, Density Upper Limit and Quantization of Space

D. Kwiat 534

Towards 6D Little String Theory of Particles

R. Raitio 546

Bound State Description of Particles from a Quantum Field Theory of Fermions and Bosons, Compatible with Relativity

H.-P. Morsch 562

Classical Cosmology II. The Einstein Ring

L. Zaninetti 574

Constraints on Asymmetric Dark Matter in Quintessence Model

S. J. Qiu, H. Iminniyaz 599

The Fate of Supersymmetry in Quantum Field Theories

R. Raitio 609

Direct Derivation of the Neutrino Mass

V. Krasnolovets 621

Life Origin in the Milky Way Galaxy: I. The Stellar Nucleogenesis of Elements Necessary for the Life Origin

A. N. Safronov 647

Life Origin in the Milky Way Galaxy: II. Scanning for Habitable Stellar Systems on Behalf of Future Space Missions

A. N. Safronov 681

Life Origin in the Milky Way Galaxy: III. Spatial Distribution of Overheated Stars in the Solar Neighborhood

A. N. Safronov 693

The Effect of a Monatomic Layer on a Surface on the Transition Radiation

A. N. Safronov 710

Calculations of the Electron Radius

A. Irani 724

The Nature of Inertia Explained Using the Field Theory

B. Kovac..... 726

The Origin, Properties and Detection of Dark Matter and Dark Energy

S. Kornowski..... 749

Dialectical Thermodynamics' Solution to the Conceptual Imbroglia That Is the Reversible Path

J. C. Íñiguez..... 775

The GBR Hypothesis Revisited

L. Nash..... 800

Non-Uniform Pion Tetrahedron Aether and Electron Tetrahedron Model

R. Rom..... 810

Relativistic Heavy Ion Collider and the Large Hadron Collider for Heavy Ion Fusion

A. Irani 825

A Many Worlds Interpretation of the Dark Universe

R. D. Bateson 828

Dark Galaxies, Sun-Earth-Moon Interaction, Tunguska Event—Explained by WUM

V. S. Netchitailo..... 836

An Original Didactic about Standard Model (Geometric Model of Particle: The Quarks)

G. Guido, A. Bianchi, G. Filippelli..... 854