

ISSN: 2380-4327 Volume 4, Number 1, January 2018



# Journal of High Energy Physics, Gravitation and Cosmology



[www.scirp.org/journal/jhepgc](http://www.scirp.org/journal/jhepgc)

# Journal Editorial Board

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

<http://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

**Dr. Kazuharu Bamba**

Fukushima University, Japan

**Dr. Alexander Burinskii**

Laboratory of Theoretical Physics in Nuclear Safety Institute of the  
Russian Academy of Sciences, Russia

**Prof. Farhad Darabi**

Azərbaycan Şahid Mədanı University, Iran

**Dr. Luca Fabbri**

University of Bologna, Italy

**Dr. Seyed Hossein Hendi**

Shiraz University, Iran

**Arun Kenath**

Christ University, India

**Dr. Huda E. Khalid**

Mosul University, Iraq

**Dr. Lino Miramonti**

Università degli Studi di Milano, Italy

**Dr. Hooman Moradpour**

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

**Prof. Jorge Ovalle**

Simón Bolívar University, Venezuela

**Prof. Waldyr A. Rodrigues Jr.**

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

**Prof. Matteo Luca Ruggiero**

DISAT, Polytechnic University of Turin, Italy

**Dr. Burra Gautam Sidharth**

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

**Dr. Anirvan Sircar**

Intel Corporation, USA

**Dr. Lorenzo Zaninetti**

Department of Physics, Italy

# Table of Contents

**Volume 4    Number 1**

**January 2018**

## **Analysis of Maxwell's Equations. Cosmic Magnetism**

V. S. Netchitailo.....1

## **Gedankenexperiment for Contributions to Cosmological Constant from Kinematic Viscosity Assuming Self Reproduction of the Universe with Non-Zero Initial Entropy**

A. W. Beckwith.....8

## **Gedankenexperiment, Assuming Nonsingular Quantum Bounce Friedman Equations Leading to a Causal Discontinuity between Pre Planckian to Planckian Physics Space-Time Regime**

A. Beckwith.....14

## **A Hydrodynamic Model Including Phase Transition and the Thermal Motion Induced Transverse Momentum Distributions in $p$ - $p$ Collisions at LHC Energies**

Z. J. Jiang, D. F. Xu, Y. Zhang.....20

## **Analysis of the Expansion of Space and a Theory of the Big Implosion**

P. Gradenwitz.....31

## **Showing Fjortof's Theorem Does Not Apply for Defining Instability for Early Universe Thermodynamic Potentials. Asking If Nucleated Particles Result at/before Electro-Weak Era Due to Injection of Matter-Energy at the Big Bang?**

A. Beckwith.....48

## **Is Temperature Quenching in the Early Universe Due to Particle Production, Or Quantum Occupation States, Or the Influence of Quantum Teleportation?**

A. W. Beckwith.....60

## **Do Physical Laws/Physics Parameter Constants Remain Invariant from a Prior Universe, to the Present Universe?**

A. W. Beckwith.....68

## **Setting Time as Purely Imaginary in Regime of Space-Time before Causal Barrier and Planckian Space-Time**

A. W. Beckwith.....92

## **New Procedure for Delineating the Mass of a Higgs Boson, While Interpolating Properties of the Scalar Singlet Dark Matter Model**

A. W. Beckwith.....96

## **The Photometric Maximum in Cosmicflows-2**

L. Zaninetti.....123

## **Thomas Precession by Uniform Acceleration and Gravity**

M. Pardy.....132

## **Supplying Conditions for Having up to 1000 Degrees of Freedom in the Onset of Inflation, Instead of 2 to 3 Degrees of Freedom, Today, in Space-Time**

A. W. Beckwith.....143

## **Dynamo Speed Control and Tectonics—Modeling Earth as a Shunt Wound DC Machine**

G. Poole.....152

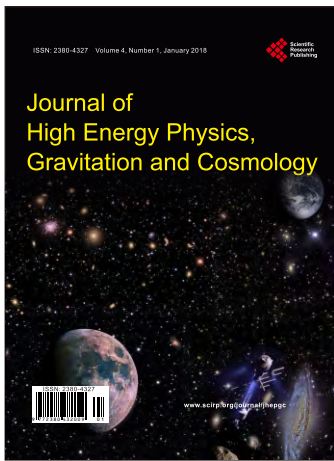
## **The Matter-Antimatter Asymmetry Problem**

B. A. Robson.....166

## **Variational Principle in an Expanding Universe**

G. Guido, G. Filippelli.....179





## Journal of High Energy Physics, Gravitation and Cosmology

ISSN Print: 2380-4327 ISSN Online: 2380-4335  
<http://www.scirp.org/journal/jhepgc>

Journal of High Energy Physics, Gravitation and Cosmology (JHEPGC) is a cutting edge research periodical aimed to be forward looking and innovative and, at the same time, remaining in the mainstream. In other words, we are all in favor of being open minded about alternatives to mainstream, but they must be properly formulated and plausible scientific proposals, supported by mathematical rigor. In fact, being open mind in Science is a good thing and we encourage mainstream as well as avant-garde research papers but they must be grounded in real science and of course meet with our refereeing standards.

The need for such a journal has become more than apparent when recent cosmological observation and measurement has made it clear that new discoveries (particularly the discovery of Dark Energy), the accelerated cosmic expansion and gravitational waves have shaken the very foundation of High Energy Physics, Gravitation and Cosmology. Thus we, on the one hand, need to be truly open minded, i.e. in the sense clarified above. On the other hand, we have to adhere as much as possible to our time tested theories and be guided even more than before by observations and experiments.

The Journal is intended to fulfill this double edge philosophy religiously. It goes without saying that the refereeing of submitted papers will be also both rigorous and swift. Following what we have said, the Journal will predictably cover, but will not be restricted only to, the following subjects:

### Subject Coverage

- Accelerated Cosmic Expansion
- Advances in Mathematical Methods
- Astronomy and Astrophysics
- Black Holes
- Cosmic Quantum Entanglement
- Cosmic-Ray Physics
- Dark Energy
- Dark Matter
- Dimensional Regularization
- Extended Theories of Gravity
- Fractal Models of Space Time
- Gravitational Waves
- K-Theory
- Loop Quantum Gravity
- M-Theory
- N-Category Theory Applied to Physics and Cosmology
- Non-Commutative Geometry
- Non-Demolition Quantum Measurement
- Observational Techniques
- Phenomenological Oriented Theories of Particles and Field String Theories
- Quantum Field Theories in Curved Space Time
- Quantum Teleportation
- Renormalization
- Scale Relativity
- Theoretical and Experimental High Energy Physics
- Topological Defects
- Unification of Fundamental Interactions
- Varying Speed of Light

### Website and E-Mail

<http://www.scirp.org/journal/jhepgc> E-mail: [jhepgc@scirp.org](mailto:jhepgc@scirp.org)

## What is SCIRP?

Scientific Research Publishing (SCIRP) is one of the largest Open Access journal publishers. It is currently publishing more than 200 open access, online, peer-reviewed journals covering a wide range of academic disciplines. SCIRP serves the worldwide academic communities and contributes to the progress and application of science with its publication.

## What is Open Access?

All original research papers published by SCIRP are made freely and permanently accessible online immediately upon publication. To be able to provide open access journals, SCIRP defrays operation costs from authors and subscription charges only for its printed version. Open access publishing allows an immediate, worldwide, barrier-free, open access to the full text of research papers, which is in the best interests of the scientific community.

- High visibility for maximum global exposure with open access publishing model
- Rigorous peer review of research papers
- Prompt faster publication with less cost
- Guaranteed targeted, multidisciplinary audience



**Website: <http://www.scirp.org>**

**Subscription: [sub@scirp.org](mailto:sub@scirp.org)**

**Advertisement: [service@scirp.org](mailto:service@scirp.org)**