Proceedings of
2nd International Conference on
ASTROPHYSICS AND PARTICLE PHYSICS
November 13-15, 2017 | San Antonio, USA
Day 1  November 13, 2017

08:00-08:30 Registrations

Conference Hall: Texas A

08:30-08:55  Opening Ceremony

Keynote Forum

08:55-09:00  Introduction

09:00-09:30  Title: New views of fusion in the sun using studies of the charge symmetric reactions T(4He)2n and 3He(4He,4He)2p at laser fusion facilities
Andrew Bacher, Indiana University, USA

09:30-10:00  Title: Solitons' dynamics in regions with sharp gradients of basic parameters of propagation medium
Vasily Yu Belashov, Kazan Federal University, Russia

Plenary Talk

10:00-10:45  Title: Does the computational unified field theory (CUFT) challenge the “Big-Bang theory”?  
Jehonathan Bentwich, Brain Perfection LTD, Israel

Panel Discussion

Networking & Refreshment Break 10:45-11:05 @ Foyer

Workshop on Status of condensed neutrino matter research

11:05-11:25  Title: Condensed neutrino objects as dark matter
P D Morley, Booz-Allen-Hamilton, USA

11:25-11:45  Title: Condensed neutrino object models and galaxy cluster data
D J Buettner, USA

Sessions:
Astrophysics and Space Science  |  Nuclear Astrophysics  |  Dark Matter and Dark Energy

Session Chairs: Vasily Yu Belashov, Kazan Federal University, Russia
Session Co-chairs: Ivan Zhelyazkov, Sofia University, Bulgaria

11:45-12:05  Title: Black holes observed gates to a parallel universe
Ghassan H Halasa, University of Jordan, Jordan

12:05-12:25  Title: Scalar fields as dark matter
Tonatiuh Matos, Stanford University of Medicine, USA

12:25-12:45  Title: Multidimensional nonlinear ion-acoustic waves in a weakly relativistic plasma
Vasily Yu Belashov, Kazan Federal University, Russia

Session Introduction

14:00-14:20  Title: Kelvin–Helmholtz instability in solar jets observed by Hinode and SDO/AIA
Ivan Zhelyazkov, Sofia University, Bulgaria

14:20-14:40  Title: The γ-ray emission produced by protons that escape from supernova remnant G349.7+0.2
Xiao Zhang, Nanjing University, China

14:40-15:00  Title: Is dark matter present in our galaxy?
Piotr Gnaciński, University of Gdańsk, Poland

15:00-15:20  Title: Remarks regarding the dark matter problem
Anton Lipovka, Sonora University, Mexico

Panel Discussion

Group Photo 12:50-13:00

Lunch Break 13:00-14:00 @ Texas E
Title: Determination of classical distributions of electrons and ions with inertias containing Boltzmann relations and equation of electron to ion temperature ratio $\alpha$ for non-thermal plasma composition
Bhaben Chandra Kalita, Gauhati University, India

Title: About the dependence of the black-body force on space-time geometry and topology
Marcony S Cunha, Ceará State University, Brazil

Panel Discussion

Network & Refreshment Break 16:00-16:20 @ Foyer

Title: About the dependence of the black-body force on space-time geometry and topology
Marcony S Cunha, Ceará State University, Brazil

Panel Discussion

Networking & Refreshment Break 16:00-16:20 @ Foyer

Title: Evolution of the Universe
Vladimir S Netchitailo, BIOLASE, USA

Title: Alpha-decay energies of superheavy nuclei for the Fayans functional
Eduard E Saperstein, National Research Centre ‘Kurchatov Institute’, Russia

Title: Nuclear stability from another point of view
Xiaodong Li, National University of Defense Technology, China

Day 2 November 14, 2017
Conference Hall: Texas A

Keynote Forum

09:00-09:30 Title: Weaknesses in the Big Bang Theory: The need for new theory
Ghassan H Halasa, University of Jordan, Jordan

09:30-10:00 Title: Nature of the cosmological constant and geometrical origin of quantization
Anton Lipovka, Sonora University, Mexico

Workshop

Title: Nonlinear dynamics of the 3D solitary Alfvén waves in the ionospheric and magnetospheric plasma
Vasily Yu Belashov, Kazan Federal University, Russia

Panel Discussion

Networking and Refreshment Break 10:40-11:00 @ Foyer

Sessions:
Particle Physics | Cosmology | Gravitational Physics | High Energy Physics | Atomic and Molecular Astrophysics

Session Chairs: Anton Lipovka, Sonora University, Mexico
Session Co-chairs: Heng Xiao, Jinan University, China

Session Introduction

11:00-11:20 Title: Photodynamics: How massive photons, gravitons, gluons and neutrinos manage to travel at the speed of light
Robert J Martineau, NASA Goddard Space Flight Centre, USA

11:20-11:40 Title: Pauli principle and Clifford algebra
Claude Daviau, Fondation Louis de Broglie, France

11:40-12:00 Title: Analog of the Peter-Weyl theorem for Lorentz group and Y-Map in loop quantum gravity
Leo Perlov, University of Massachusetts, USA

12:00-12:20 Title: Proposed link between the periodic table and the standard model
John O Roberts, University of Liverpool, UK

12:20-12:40 Title: Asymptotic safety in quantum gravity: Renormalizability and beyond
Martin Reuter, University of Mainz, Germany

12:40-13:00 Title: Effect of differential cross section in Breit-wheeler pair beaming
Ribeyre X, University of Bordeaux, France
<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker</th>
<th>Institution</th>
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<tbody>
<tr>
<td>14:00-14:20</td>
<td>Title: Accelerated expansion of a symmetric universe</td>
<td>M J Van Der Burgt</td>
<td>Delft University, Netherlands</td>
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<tr>
<td>14:20-14:40</td>
<td>Title: Hypersphere world–Universe model</td>
<td>Vladimir S Netchitailo</td>
<td>BIOLASE, USA</td>
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<td>14:40-15:00</td>
<td>Title: Modeling of compact stars in embedding class one space time in general relativity</td>
<td>Sunil Kumar Maurya</td>
<td>University of Nizwa, Oman</td>
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<td>15:00-15:20</td>
<td>Title: Physical and nonphysical modes in the light front formulation for the LC gauge and the Lorentz gauge conditions</td>
<td>Elżbieta Dzimida-Chmielewska</td>
<td>University of Białystok, Poland</td>
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<tr>
<td>15:20-15:40</td>
<td>Title: Mixing of relativistic ideal gases with relative relativistic velocities</td>
<td>Heng Xiao</td>
<td>Jinan University, China</td>
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<tr>
<td>15:40-16:00</td>
<td>Title: Deformable media with quantized effects</td>
<td>Dmitry Kirko</td>
<td>Moscow Engineering Physics Institute, Russia</td>
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<tr>
<td>16:00-16:20</td>
<td>Title: Superluminal representations in modern physical researches</td>
<td>Dmitri Kirko</td>
<td>Moscow Engineering Physics Institute, Russia</td>
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<td>16:20-16:40</td>
<td>Title: Two groups of oppositely charged particles as building blocks for the start of the universe</td>
<td>M J Van Der Burgt</td>
<td>Delft University, Netherlands</td>
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<td>16:40-17:00</td>
<td>Title: Plasma constraints on the cosmological abundance of magnetic monopoles and the origin of cosmic magnetic fields</td>
<td>Dmitri Kirko</td>
<td>Moscow Engineering Physics Institute, Russia</td>
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<td>17:00-17:20</td>
<td>Title: Light energy from dipole repeller and its influence on motions of galaxies</td>
<td>Chidiebere Anigbo</td>
<td>University of Nigeria, Nsukka, Nigeria</td>
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<td>17:20-17:40</td>
<td>Title: Physical and nonphysical modes in the light front formulation for the LC gauge and the Lorentz gauge conditions</td>
<td>M Medvedev</td>
<td>University of Kansas, USA</td>
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<tr>
<td>18:00-18:20</td>
<td>Title: Study on inversing method of ionospheric properties with spaceborne radar data</td>
<td>Xueqing Zhang</td>
<td>Montana Tech of the University of Montana, USA</td>
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<td>18:40-19:00</td>
<td>Title: The observed evidence of both invalidating black hole model at the galactic center and magnetic monopole existence</td>
<td>Qiuhe Peng</td>
<td>Nanjing University, China</td>
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<td>19:30-19:50</td>
<td>Title: Wavy Theory</td>
<td>Al Zahrani Abdullah</td>
<td>Warsaw University of Technology, Poland</td>
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<td>Title: Collective effects in disk galaxies</td>
<td>Xiaolei Zhang</td>
<td>George Mason University, USA</td>
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<td>Title: Asymptotic giant branch stars: Dust manufacturers of their host environments</td>
<td>Flavia Dell’Agli</td>
<td>Instituto de Astrofísica de Canarias, Spain</td>
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<td>11:20-11:40</td>
<td><strong>Title: The Milky Way's supermassive black hole: How good a case is it? A challenge for astrophysics and philosophy of science</strong>&lt;br&gt;Andreas Eckart, University of Cologne, Germany</td>
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<td>11:40-12:00</td>
<td><strong>Title: Giant impact and the formation of the Colorado Plateau</strong>&lt;br&gt;Xiaolei Zhang, George Mason University, USA</td>
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<td>12:00-12:20</td>
<td><strong>Title: Stable field detection as a novel method for blind sensing of weak radio signals</strong>&lt;br&gt;Jakub Nikonowicz, Poznań University of Technology, Poland</td>
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<td>12:20-12:40</td>
<td><strong>Title: Implication of strong magnetic field near the galactic center (GC)</strong>&lt;br&gt;Qiuhe Peng, Nanjing University, China</td>
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<td>12:40-13:00</td>
<td><strong>Title: Comparative studies of cosmological models in alternative theory of gravity with LVDP and BVDP</strong>&lt;br&gt;Mishra R K, SLIET, India</td>
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<td><strong>Title: Observational signature of grain growth in the protoplanetary disk around young star LkHα 330</strong>&lt;br&gt;Eiji Akiyama, National Astronomical Observatory of Japan, Japan</td>
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<td>14:20-14:40</td>
<td><strong>Title: Hypermassive black holes in the universe</strong>&lt;br&gt;Yu-Qing Lou, Tsinghua University, China</td>
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<td>14:40-15:00</td>
<td><strong>Title: Neutrino mixing in matter at extremely high energies</strong>&lt;br&gt;Bipin Singh Koranga, University of Delhi, India</td>
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<td><strong>Video Presentations</strong></td>
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<td>15:00-15:15</td>
<td><strong>Title: Absorption coefficient across atmospheric troposphere layer</strong>&lt;br&gt;Wei Peng-Sheng, National Sun Yat-Sen University, Taiwan</td>
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<td>15:15-15:30</td>
<td><strong>Title: The fate and role of freely propagating cosmic photons in expanding universes</strong>&lt;br&gt;Hans Joerg Fahr, University of Bonn, Germany</td>
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<td>15:30-15:45</td>
<td><strong>Title: Direct observation of the strong (nuclear) interaction in the optical spectra of solids</strong>&lt;br&gt;V G Plekhanov, Fonoriton Sci Lab, Estonia</td>
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<td><strong>Title: Transportation process in the gravitational collapse</strong>&lt;br&gt;Hafiza Rizwana Kausar, University of Central Punjab, Pakistan</td>
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<td><strong>Awards &amp; Closing Ceremony</strong></td>
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