

4th International Conference on

ATOMIC AND NUCLEAR PHYSICS

October 26-27, 2018 | Boston, USA



Day 1 October 26, 2018

Conference Hall: Meeting Room 3

09:00-09:30 Registrations

09:30-09:55 Opening Ceremony

Keynote Forum

09:55-10:00 Introduction

Title: Depolarization of atoms induced by collisions

10:00-10:45

Cristian Bahrim, Lamar University, USA

Panel Discussion

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

11:05-11:50 **Title: Time-dependent quantum mechanics in particle and nuclear physics**
Athanasios Petridis, Drake University, USA

11:50-12:35 **Title: Atomic physics, spectroscopy and fusion applications of tungsten**
Alla S Safronova, University of Nevada-Reno, USA

Group Photo 12:35-12:45

Panel Discussion

Lunch Break 12:45-13:45 @ Bistro

Workshop

13:45-14:45 **Title: Applications of many-body perturbation theory to actinide atoms**
Igor M Savukov, Los Alamos National Laboratory, USA

Sessions: Atomic Physics | Atomic Spectroscopy | Atomic Collisions

Session Chair: Biswanath Rath, North Orissa University, India

Session Co-chair: Mattias Eriksson, Blekinge Institute of Technology, Sweden

Session Introduction

14:45-15:15 **Title: Total statistical weights of atoms and ions**
Mattias Eriksson, Blekinge Institute of Technology, Sweden

15:15-15:45 **Title: Ab initio precision CI-MBPT calculations for noble-gas atoms**
Igor M Savukov, Los Alamos National Laboratory, USA

Panel Discussion

Networking & Refreshment Break 15:45-16:05 @ Foyer

16:05-16:35 **Title: Atomic physics, spectroscopy and applications of tungsten**
Alla S Safronova, University of Nevada-Reno, USA

16:35-17:05 **Title: Zeeman and Stark effects of Ba highly-excited states**
Yuki Nojiri, Toho University, Japan

17:05-17:35 **Title: Pseudopotential for many-electron atoms**
Eric Ouma Jobunga, Technical University of Mombasa, Kenya

17:35-18:05 **Title: Interatomic potentials, atom energy and screening constants**
Alexander N Zinoviev, Ioffe Institute St Petersburg, Russia

Panel Discussion

Day 2 October 27, 2018

Conference Hall: Meeting Room 3

Keynote Forum

Introduction

09:00-09:45

Title: Implications of the link between the periodic table and the standard model

John Owen Roberts, Open University, UK

09:45-10:30

Title: Non-Hermitian real operators in quantum mechanics

Biswanath Rath, North Orissa University, India

Panel Discussions

Networking & Refreshment Break 10:30-10:50 @ Foyer

Video Presentations

10:50-11:20

Title: Creation of atomic particles from electrical energy flow from GOD in space

Manish Kumar, Indian Institute of Technology-BHU, India

11:20-11:50

Title: Determination of the radial flow in d(4.4 GeV) + Au interaction

S P Avdeyev, Joint Institute for Nuclear Research, Russia

11:50-12:20

Title: Influence of strong magnetic and electric fields on the hot carriers kinetic processes in the semiconductors bulk

Igor Vladimirovich Malyshev, South Federal University, Russia

Panel Discussions

Lunch Break 12:20-13:20 @ Bistro

Sessions: Nuclear Physics | Quantum Nuclear Physics | Particle Physics

Session Chair: John Owen Roberts, Open University, UK

Session Co-chair: Igor M Savukov, Los Alamos National Laboratory, USA

Session Introduction

13:20-13:50

Title: A quantum framework for the periodic and Roberts-Janet tables

John Owen Roberts, Open University, UK

13:50-14:20

Title: Structure of electron, proton and neutron

M J Faraji, Saleh Research Centre, Iran

14:20-14:50

Title: Dielectical omni dimensios and directions of quantum radiant particles of monistic substance

Chidiebere Anigbo, Institute of Technology and Management, Nigeria

14:50-15:20

Title: Ultimate structure of the proton

M J Faraji, Saleh Research Centre, Iran

15:20-15:50

Title: Magnetic dipole, electric quadrupole moments and electron scattering form factors of neutron-rich cross - shell *sdpf* nuclei

R A Radhi, University of Baghdad, Iraq

Panel Discussions

Networking & Refreshment Break 15:50-16:10 @ Foyer

16:10-16:40

Title: Generation and coherent proprieties of entangled bi-modal field and its application

Nicolae A Enaki, Institute of Applied Physics, Moldova

16:40-17:10

Title: Liquid drop model of nuclei with account of viscosity

Azamat Khokonov, Kabardino-Balkarian State University, Russia

Panel Discussion

Awards and Closing Ceremony