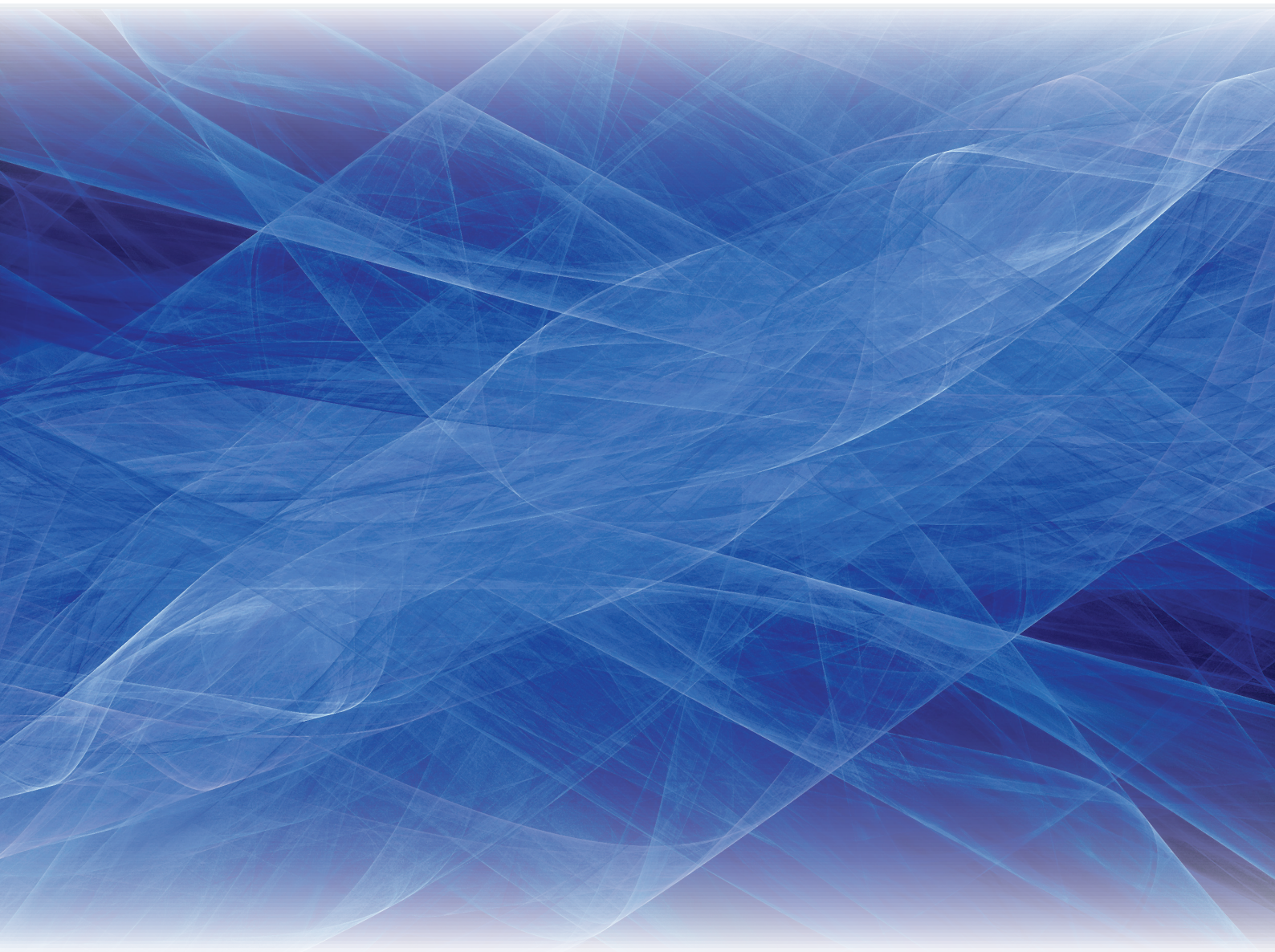
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816th Conference

Scientific Program

International Conference on

Atomic and Nuclear Physics

November 17-18, 2016 Atlanta, USA



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Day 1 November 17, 2016

08:30-09:30 **Registrations**

Conference Hall

conferenceseries.com **09:30-10:00** **Opening Ceremony**

Keynote Forum

10:00-10:05 **Introduction**

10:05-10:45 **Title: Ion-impact ionization of atoms and molecules**
M S Pindzola, Auburn University, USA

Group Photo and Networking & Refreshment Break 10:45-11:05

11:05-11:45 **Title: Detecting nothing with anti-electrons**
Marc H Weber, Washington State University, USA

Sessions:
Atomic and Molecular Physics | Atomic Collisions

Session Chair: Moni Behar, Universidade Federal do Rio Grande do Sul, Brazil
Session Co-chair: Xiaoxing Zhang, Wuhan University, P R China

Session Introduction

11:45-12:10 **Title: Coulomb heating behavior of fast light diclusters channeled into Si (110) direction**
Moni Behar, Universidade Federal do Rio Grande do Sul, Brazil

12:10-12:35 **Title: Influence of spin-orbit interaction on magnetic properties of fullerenes**
Elena V Orlenko, Peter the Great St. Petersburg Polytechnic University, Russia

12:35-13:00 **Title: Random unitary evolution model of dissipation, dephasing and quantum Darwinism**
Nenad Balaneskovic, University of Technology Darmstadt, Germany

Lunch Break 13:00-14:00

14:00-14:25 **Title: Encyclopedia micro-array traps for storing electrons or positrons – A first step towards antimatter as a source of energy**
Marc H Weber, Washington State University, USA

14:25-14:50 **Title: TBA**
Allen L Landers, Auburn University, USA

14:50-15:15 **Title: Recent progress in the development of nanomaterials-based sensors for applications in SF_6 insulated equipment monitoring**
Xiaoxing Zhang, Wuhan University, P R China

15:15-15:40 **Title: Study on the structural evolution of thiolate-protected gold clusters by means of ^{197}Au Mössbauer spectroscopy**
Norimichi Kojima, Toyota Physical and Chemical Research Institute, Japan

Networking & Refreshment Break 15:40-16:00

Plenary Talk

16:00-16:30 **Title: Counter-intuitive results in atomic and molecular physics**
Eugene Oks, Auburn University, USA

16:30-16:55 **Title: Positron scattering by lithium atom with electron exchange**
Elena V Orlenko, Peter the Great St. Petersburg Polytechnic University, Russia

16:55-17:20 **Title: On spl (5, 5) super-symmetric Eigen vectors of the 5D discrete Fourier transform**
Natig Atakishiyev, Universidad Nacional Autónoma de México, México

Panel Disscussion

Day 2 November 18, 2016

Conference Hall

Keynote Forum

09:30-10:10 **Title: Determination of nuclear charge radii using atomic laser spectroscopic measurements**
William A Van Wijngaarden, York University, Canada

10:10-10:50 **Title: Quantum simulation of thermodynamic and transport properties of the quark gluon plasma**
Vladimir Filinov, Joint Institute for High Temperatures-Russian Academy of Sciences, Russia

Networking & Refreshment Break 10:50-11:10

Sessions:
Experimental Methods | Nuclear Physics | Current Frontiers of Nuclear and Atomic Physics

Session Chair: William A Van Wijngaarden, York University, Canada
Session Co-chair: Xiaodong Li, National University of Defense Technology, P R China

Session Introduction

11:10-11:35 **Title: On the role of bremsstrahlung in electron-nucleus collisions**
Doris Jakubassa-Amundsen, Ludwig Maximilian University of Munich, Germany

11:35-12:00 **Title: Accurate first-principle calculations of the spectra of diatomic molecules in planetary atmospheres**
John Morrison, University of Louisville, USA

12:00-12:25 **Title: To understand atomic nucleus from a new nuclear structure model**
Xiaodong Li, National University of Defense Technology, P R China

12:25-12:50 **Title: Atomic energy is the source of power which is another form of electrical energy**
Manish Kumar, Indian Institute of Technology- BHU, India

Lunch Break 12:50-13:50

13:50-14:15 **Title: Atomic power and cryptography: opportunities, challenges and achievements**
Mohamed Hamdi, Sup'Com, Elgazala Technopark, Tunisia

14:15-14:40 **Title: Cooperative radiation between blocks of three radiators through single- and two-photon mutual interactions**
Nicolae A Enaki, Institute of Applied Physics of Academy of Sciences of Moldova, Moldova

14:40-15:05 **Title: Spin radiation effects in classical and quantum electrodynamics: New look at an old experiment**
S L Lebedev, Surgut State University, Russia

Poster Presentations 15:05-16:05

ANP-01 **Title: Quasi-classical chemisorption study about hydrogen molecule storage on Cu_{13} and Pd_{13} atomic clusters**
Nada Elzein Eisa Omer, University of Dammam, KSA

ANP-02 **Title: Attractor spaces of dissipative dephased random unitary evolution and quantum Darwinism**
Nenad Balaneskovic, University of Technology Darmstadt, Germany

ANP-03 **Title: X-ray irradiation-induced changes in (PVA–PEG–Ag) polymer nano-composites films**
M M Abutalib, King Abdulaziz University, Saudi Arabia

ANP-04 **Title: Nanocrystalline Cu_2O/p-Si solar light-responsive Schottky photodiode**
Asmaa A Hendi, King Abdulaziz University, Saudi Arabia

Panel Disscussion

Awards & Closing Ceremony

Networking & Refreshment Break 16:05-16:25

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