



UNITED Scientific
Group
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Physics
July 17-19, 2023, Los Angeles, CA

INTERNATIONAL CONFERENCE ON

PHYSICS AND ITS APPLICATIONS

JULY 17-19, 2023 | LOS ANGELES, CA

Supporters

Results in Physics Journal
Indexed in Scopus
Impact Factor: 4.565



<https://physics.unitedscientificgroup.org/>

Last minute changes due to functional, private, or organizational needs can be necessary. The event organizer accepts no liability for any additional costs caused by a change of program.

Program is subject to change

Last Update: May 26, 2023

Scientific Sessions

***Astroparticle Physics**

***Atomic & Molecular Physics**

***Particle Physics**

***Quantum Physics**

***Nuclear Physics**

***Material Physics**

***Lasers, Optics & Photonics**

***Polymer physics**

***Condensed Matter Physics**

***Nano-Physics**

***Nonlinear Science**

***Statistical Physics**

***Computational Physics**

***Mathematical Physics**

***Econophysics**

***Instruments & Instrumentation**

***Acoustics**

***Plasma Physics**

***Fluid Physics**

***Biophysics**

***Chemical Physics**

***Radiation Physics**

Supporters

Results in Physics Journal

All registered speakers of the Physics-2023 will be given an opportunity to publish their full-length manuscript as a Special Issue in Results in Physics journal by Science Direct (Elsevier) (Impact Factor: 4.565) with a discounted

Keynotes



Paul S Weiss

University of California, Los Angeles, CA

Title: Understanding & Controlling Charge, Heat, and Spin at Atomically Precise Interfaces



Thomas J. Buckholtz

Ronin Institute for Independent Scholarship, Montclair, NJ

Title: Dark matter and dark energy: Specifications that associate with data



Weng Cho Chew

Purdue University, West Lafayette, IN

Title: Quantum Electromagnetics: Hamiltonian Formulation via the Lorenz Gauge



Edward J Kansa,

Convergent Solutions, Livermore, CA

Title: Accurate And Stable Methods for Full. Ill-Conditioned Equation Systems Arising from Radial Basis Functions



Milind N Kunchur

University of South Carolina, Columbia, SC

Title: The human auditory system and the time-frequency relationship



Manuel G Velarde

Complutense University of Madrid, Spain

Title: Mechanics Meets Electronics at The Nanolevel Ruling out Heat. Case Study: A Field Effect Transistor Based on Ballistic Charge Transport



C G Vayenas
University of Patras, Greece

Title: To be announced

Zhijun Qiao
University of Texas Rio Grande Valley, Edinburg, Texas

Title: To be announced

Oral Presentations

Title: Cosmic Censorship of Smooth Structures on Spacetimes

Vladimir Chernov, Dartmouth College, Hanover, NH

Title: A study on the thickness dependence of $\text{Ba}_{0.5}\text{Sr}_{0.5}\text{Fe}_{12}\text{O}_{19}/\text{rGO}$ nanohybrid on its microwave absorption efficiency

Dhanakotti Rajan Babu, Vellore Institute of Technology, India

Title: The Dual Theory of Relativity and Its Implications

Tepper L Gill, Howard University, Washington, D.C

Title: Bi-Complex Algebra Applications to Electromagnetic Waves and Beam Dynamics

Alexei Smirnov, Advanced Energy Industries, Mountain View, CA

Title: Probing the gas in and around galaxies with quasar observations

Varsha P. Kulkarni, University of South Carolina, Columbia, SC

Title: Berezin integral as a limit of Riemann sum

Roman Sverdlov, University of New Mexico, Albuquerque, NM

Title: Using Fractal Geometry to Study Signals with Scale-Free Dynamics

Tahmineh Azizi, University of Wisconsin-Madison, Madison, WI

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| Title: Burning plasma regime for tokamaks |
| Leonid Zakharov , LiWFusion, Montclair,Princeton, NJ |
| Title: An example of complex modeling in biology: Studying molecular regulation of membrane curvature during endocytosis |
| Xinxin Wang , UT Southwestern Medical Center,Dallas, TX |
| Title: Towards Quantum Computing and its Applications |
| Naveed Mahmud , Florida Institute of Technology,Melbourne, FL |
| Title: Optoelectronic Control of Surface Plasmon Polaritons Waves at Metal-Doped semiconductor Interfaces |
| Raj K Vinnakota , Troy University,Troy, AL |
| Title: Development of real-time time-dependent density-functional-theory code, INQ, and its application to nonequilibrium quantum dynamics |
| Tadashi Ogitsu , Lawrence Livermore National Laboratory, Livermore, CA |
| Title: Neural Networks with Local Converging Inputs (NNLCI) for Solving Conservation Laws and Other Differential Equations with Greatly Reduced Complexity |
| Yingjie Liu , Georgia Institute of Technology, Atlanta, GA |
| Title: Amyloid Protein Self-Assembly at the Surface-Liquid Interface |
| Yuri Lyubchenko , University of Nebraska Medical Center, Omaha, NE |
| Title: Cosmology with Time-Varying Curvature |
| John Botke , Ronin Institute, Montclair,NJ |
| Title will be updated soon!!!! |
| Arit Kumar Bishwas , PricewaterhouseCoopers US, Fremont, CA |
| Title will be updated soon!!!! |
| William Lawless ,Paine College, Augusta, GA |
| Title: A New Class of Weighted CUSUM Statistics |
| Xiaoping Shi , The University of British Columbia - Okanagan Campus, Canada |

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| Title: Cosmic radiation monitoring with Health Canada's Fixed Point Surveillance network |
| Chuanlei Liu , Radiation Protection Bureau of Health Canada, Canada |
| Title: Efficient space data retrieval technique for inhomogeneous Earth and Ocean surfaces by using LBL forward model |
| Rajinder Kumar Jagpal , Epic Climate Green, Canada |
| Title: Tackling Scattering in X-ray Imaging with Time of Flight |
| Julien Rossignol , Universite de Sherbrooke, Canada |
| Title will be updated soon!!!! |
| Daniel Offin , Queen's University, Canada |
| Title: Phonon Dominated Thermal Transport in Metallic Niobium Diselenide from First Principles Calculations |
| Jorge Morales , Universidad Mayor, Chile |
| Title: Radiation Physics in Medicine |
| John Sutcliffe , IOP, IPEM, UK |
| Title: In silico biofluid mechanics for cardiovascular problems |
| Asimina Kazakidi , University of Strathclyde, UK |
| Title: Consequences of a rigid analysis of the Schrödinger equation for the interpretation of the wavefunction of bound states and the foundations of quantum mechanics |
| Emil Roduner , University of Stuttgart, Switzerland |
| Title: SSHR, a new solar reference spectrum obtained from space-based observations and modeling |
| Mustapha Meftah , Cnrs / Latmos, France |
| Title: The effect of biaxial strain on the electronic properties of (SnO ₂ /TiO ₂) _n Superlattices |
| Najwa Harrati , UCCS/Artois, France |
| Title: Diffusive representations for the analysis and simulation of waves in liners, porous media and fluid-solid interaction. |
| Denis Matignon , ISAE-SUPAERO, University of Toulouse, France |

Title: Strong Rate of Convergence of time Euler schemes for a stochastic 2D Boussinesq model

Annie Millet, University Paris , France

Title: Entanglement between Micro-Magnetism, Electromagnetism and the Tensor Magnetic Phase theory – Symmetry, invariance and conservation laws analysis

Olivier Maloberti, UNILASALLE Amiens,France

Title: Effect of Boundaries on the Surface Superconducting Critical Temperature

Rodrigo Henrique de Braganca, Federal University of Pernambuco, Germany

Title: Analytical approximation of optimal thermoeconomic efficiencies for a StefanBoltzmann-type heat transfer law

Angela Mercedes Ares de Parga Regalado, National Autonomous University of Mexico, Mexico

Title: Ceramic deposition by low pressure cold gas spray

John Dairo Henao Penenrey, CONACYT-CIATEQ A.C., Mexico

Title will be updated soon!!!!

J L Lopez Picon, University of Guanajuato, Mexico

Title: Powerful ordered collective heat engine

Carlos E Fiore, University of Sao Paulo, Brazil

Title: Bound for spin-dependent noncommutative parameter based on Pauli equation

Carlos Alberto Stechhahn Da Silva, Criminalistic Institute of São Paulo, Brazil

Title: Thermal solitons and thermal transfer along thin wires

Michele Sciacca, Università di Palermo, Italy

Title: Physical-mathematical modeling of water networks and related problems

Fabio Caldarola, University of Calabria, Italy

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| Title will be updated soon!!!! |
| Augusto Sagnotti , Scuola Normale Superiore, Italy |
| Title: Effective and Organ Dose during SPECT/CT examinations |
| Ali Aamry , King saud medical city, Saudi Arabia |
| Title: Theoretical Analysis of Energy Reversible Nanoelectromechanical Switch for Adiabatic Computation |
| Abdulilah Mayet , King Khalid University, Saudi Arabia |
| Title will be updated soon!!!! |
| Hind , Al-Baha University, Saudi Arabia |
| Title: An innovation in used car Windscreens for Post Accident Dose Reconstruction in the Periphery of Nuclear Installations |
| Khulud saad Almuqrin , Princess Nourah bint AbdulRahman University, Saudi Arabia |
| Title will be updated soon!!!! |
| Ozan Yalcin , Havelsan Technology Radar, Turkey |
| Title: Direct-write deposition of functional nanostructures with a scanning electron microscope |
| Heinz D. Wanzenboeck , TU Wien, Austria |
| Title: Thoughts on the build-up of electromagnetic radiation and on the notion of process time |
| Tibor Berceli , Budapest University of Technology and Economics, Hungary |
| Title: Resolution capability of resist patterns and throughput using alkaline treatment under ultrasonic irradiation |
| Hideto Onishi , Saitama University, Japan |
| Title: Quantum Mutual Entropy on Classical-Quantum Boundary |
| Takashi Matsuoka , SUWA University of Science, Japan |
| Title: On the Numerical Exact Solution for Many-Body Problem Based on the Differential Forms |
| Shin-ichiro Kondo , Nagasaki University, JapanSweden |

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| Title: Phenomenological Description of Itinerant Weak Ferromagnetic Materials |
| Kazuyuki Matsumoto , Hokkaido University of Education, Japan |
| Title: Resolution improvement of ultrasound 3D imaging by single transmitter/receiver system |
| Norio Tagawa , Tokyo Metropolitan University, Japan |
| Title: Light Quantum beyond the Fermi golden rule |
| Kenzo Ishikawa , Hokkaido University, Japan |
| Title: Gauge Theory and Post-Newtonian Gravitational Fields of General Relativity, with special reference to the Dark Matter issue |
| Tsutomu Kambe , University of Tokyo, Japan |
| Title: Understanding Tactile-Texture Sensation through Various Physical Properties; High Resolution Multi-Physics Tactile Sensing and the Device |
| Hidekuni Takao , Kagawa University, Japan |
| Title: Quantum compilation for entangled state preparation |
| Le Bin Ho , Tohoku University, Japan |
| Title: Two Dimensional Micronozzle Array: Fabrication and Its Applications to Biosample Manipulation |
| Kyohei Terao , Kagawa University, Japan |
| Title will be updated soon!!!! |
| Hideki Hirayama , RIKEN, Japan |
| Title will be updated soon!!!! |
| Daisuke Suzuki , The University of Aizu, Japan |
| Title: Direct Sampling Methods for Nonlinear Inverse Problems with Moving Inhomogeneous Medium Inclusions |
| Jun Zou , The Chinese University of Hong Kong, Hong Kong |
| Title: The effective Dirac algebra by gauge field interaction in relativistic electrodynamics and its application |
| Wong Tsz Tsun , The University of Hong Kong, Hong Kong |

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| Title: Understanding the Urban Taxi Sharing Potential |
| Xianlei Dong , Shandong Normal University, China |
| Title: Relativistic Effects of rotation |
| Wang Yang , Beihang University, China |
| Title: A Comprehensive Experimental Investigation of Additives to Enhance Pool Boiling Heat Transfer of a Non-Azeotropic Mixture |
| Chen Xu , Wuhan University of Technology, China |
| Title: Nano-strained quantum dots with siloxane passivation strains as bioremediation of Hg-polluted water and soils due to Artisanal and Small-Scale Gold Mining in the Secocha Annex, Arequipa |
| Xianghua Wang , Hefei University of Technology, China |
| Title: Generation of 10dB Squeezed Light with Higher-order Spatial Mode with Optical Parametric Amplifier |
| Kui Liu , Shanxi University, China |
| Title: Chaotic Oscillation Control in Memristive System |
| Chunbiao Li , Nanjing University of Information Science and Technology, China |
| Title: Reconfigurable Valley Topological QED Platform for Qubit Operation |
| Yongyou Zhang , Beijing Institute of Technology, China |
| Title: Electronic structure and orbital properties of perovskite ruthenates $\text{SrRu}_{1-x}\text{Mn}_x\text{O}_3$ |
| Pao An Lin , Guangdong University of Petrochemical Technology, China |
| Title: High Single-Mode Selectivity V-cavity Tunable Semiconductor Laser based on GaAs |
| Tuo Chen , Changchun University of Science and Technology, China |
| Title: An experimental system to implement the coincidence detection of the first-order electromagnetic responses of the high-frequency gravitational waves in microwave band |
| Lian-Fu Wei , southwest jiaotong University, China |

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| Title will be updated soon!!!! |
| Yin Rui , Beihang University, China |
| Title will be updated soon!!!! |
| Dihao Ai , ShenZhen Polytechnic, China |
| Title: Access Quantum Relaxation Time Quantitatively Through Optical Probe |
| Xiaodong Xiang , Southern University of Science and Technology, China |
| Title: Effect of B-site donor doping on ferroelectric/piezoelectric properties of Nb-modified BiFeO ₃ -BaTiO ₃ ceramics |
| Myong Ho Kim , Changwon National University, South Korea |
| Title: An Anti-Photon: Way to Explain the Gamma Ray Burst |
| Soon-Tae Hong , Sogang University, South Korea |
| Title: Search for new physics beyond the standard model at LHC |
| JeongEun Lee , Seoul National University, South Korea |
| Title: Control of high-speed flows over aerodynamic bodies using plasma formations located in various flow areas |
| Olga Azarova , Russian Academy of Sciences, Russia |
| Title: Radiation-induced CaSi ₂ crystal nucleation and growth during the CaF ₂ epitaxy on Si |
| Anatoly Dvurechenskii , Rzhanov Institute of Semiconductor, Russia |
| Title: Age-structured population models. Numerical integration in an infinite life span framework |
| Oscar Angulo , Universidad de Valladolid, Spain |
| Title: Regularity, profiles of solutions and evolution of supports for modeling a flame propagation in a porous medium |
| Jose Luis Diaz Palencia , Universidad a Distancia de Madrid, Spain |
| Title: Uphill Diffusion during Silicide Formation in Si Nanowires through Point Contact Reaction |
| Yi-Chia Chou , National Taiwan University, Taiwan |

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| Title: Radiation Hardness of Cesium-incorporated CIGS Thin Film Solar Cells |
| Tzu-Ying Lin , National Tsing Hua University, Taiwan |
| Title: The Extended Cut-off Wavelength of Metal-Semiconductor Interface by Localized Surface Plasmon Resonance Structure |
| Ching-Fuh Lin , National Taiwan University, Taiwan |
| Title: How can a stochastic memory work for a random number generator? |
| Chao-Yao Yang , National Yang Ming Chiao Tung University, Taiwan |
| Title: TiO ₂ Supported Iridium Clusters for Low-Temperature CH ₄ Steam Reforming |
| Jyh-Chiang Jiang , National Taiwan University of Science and Technology, Taiwan |
| Title: Enhanced infrared optical responsivity and the carrier dynamics in metal-semiconductor interface |
| Zih Chun Su , National Taiwan University, Taiwan |
| Title: Pulsed Laser Ablation of Nanoparticle-embedded PMMA Composite |
| Tanant Waritanant , Mahidol University, Thailand |
| Title: On Quantum Foundation |
| Inge Svein Helland , University of Oslo, Norway |
| Title: Nanocoatings Applied in Smart Windows for a Dynamic Solar Radiation Control |
| Bjorn Petter Jelle , Norwegian University of Science and Technology, Norway |
| Title: Structural Properties and Antibacterial Activity of Zinc Sulfide Powders |
| Ftema W Aldbea , Sebha University, Libya |
| Title: A Practical Investigation of Wind Turbine Blade Erosion and Particle-Laden Flows |
| Reza Hassanian , University of Iceland, Iceland |
| Title: The effect of super-paramagnetic zinc nickel ferrites nanoparticles on microwave absorbing ability in the X band frequency range |
| Anh Thi Quynh Luong , Ho Chi Minh City University of Technology, Vietnam |

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| Title: A New GPR Data Processing Method |
| Motti Haridim , Holon Institute of Technology, Israel |
| Title: Electrochemical study of Bi-doped ZnO as an Electrode Material for High Performance Supercapacitor Applications |
| A T Ravichandran , National College, India |
| Title: Natural Field: Origin of Inertia |
| Debabrata Saha , Independent Research Scientist, India |
| Title: Efficiency of fuel on structural, particle size, surface morphology, magnetic behaviour of zinc ferrite (znfe ₂ o ₄) magnetic nanoparticles prepared by self-sustained solution combustion synthesis and its Anti-microbial properties |
| R Vidya , Vellore Institute of Technology, India |
| Title will be updated soon!!!! |
| Lynda Amirouche , University of Science and Technology of Algiers, Algeria |
| Title will be updated soon!!!! |
| Mosebetsi J Leotlela , University Of The Witwatersrand, South Africa |
| Title: Dynamics of Covid-19 and Social Distancing: Insights from an Epidemiological SIRSi-Vaccine Model with Forced Limit Cycles |
| Jose Roberto Castilho Piqueira , University of São Paulo, Brazil |
| Title: Generalized Carter[A]-Pleba 'nski solutions to Einstein-Nonlinear Electrodynamics |
| Alberto Garcia-Diaz , Cinvestav, Mexico |
| Title: Optimal geometry of the Vortex Domain wall pinning in constricted magnetic nanowires |
| Mohammed Al Bahri , A'Sharqiyah University, Oman |
| Title: An approach to the quasi-equilibrium state of a self-gravitating system |
| Amirabbas , Shiraz University, Iran |
| Title: Low cost materials: pyrite-FeX ₂ (X=S,Se) and iron oxide thin films, having desired properties for several application after their alloy with ruthenium |
| Beya Ouertani , University of Carthage, Tunisia |

Title: Geometric and optical properties of pits in CR-39 plastic etched after irradiation by 216 MeV/amu ^{12}C beam at different depths of water-chamber.

Valery Ditlov, Kurchatov Institute, Russia

Title will be updated soon!!!!

Cecile Autret, Greman laboratory, France

Title: Polarization-induced phase transitions in InGaN-based coupled quantum well

Slawomir P Lepkowski, Institute of High Pressure Physics Polish Academy of Sciences, Poland

Title: Testing precision and accuracy of weak-value measurements in a quantum computing system

Francisco De Zela, Pontifical Catholic University of Peru, Peru

Presentation Slots Available !!!!!

Exhibition space and Sponsorship opportunities are available