

Hybrid International Conference

Gravitational Physics and Astronomy

GPA2023

4-7 December 2023

General relativity and quantum mechanics, fundamentally different frameworks, so-far separately give reliable explanations of how nature works, at distinct large and low scales, respectively.

Objectives:

- developing theoretical approaches to successfully reconcile principles of general relativity with quantum mechanics and
- suggesting genuinely compatible descriptions of reality.

Topics:

- **Astronomy** (General Relativity, Gravitation, Quantum Gravity, Noncommutative Geometry, Noncommutative Algebra, Quantized General Relativity, Nature of Spacetime, EM/GW Observations, GR Simulations, Big Bang Theory, Singularities, Black Holes, Early Universe, Ultra High-Energy Cosmic rays, etc.)
- **Quantum Mechanics** (Relativistic/Gravitized Quantum Mechanics, Quantum Field Theory, Symmetry/Supersymmetry, etc.)
- **High-Energy Physics** (Theory, Experiment, Phenomenology, and Simulation)

Venues

- **Geography:** Nearest to Pyramids Plateau, Cairo, Egypt
- **Internet:** <https://indico.cern.ch/e/GPA2023>

Publication:

The conference talks shall be published as “full research papers” – not just conventional proceedings - in an indexed journal (MDPI and/or AIP)

Contact:

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