



Miranda House

UNIVERSITY OF DELHI

Name: NITISH

Department: Physics

Current Designation: Assistant Professor

Email id: nitish@mirandahouse.ac.in , nitishkrang@gmail.com

Academic Qualifications:

- Ph.D., Department of Physics and Astrophysics, University of Delhi, 2021.
- M.Sc. Physics, Hans Raj College, University of Delhi, 2014.
- B.Sc. (Hons) Physics, Hans Raj College, University of Delhi, 2012.

Research Degree(s):

Ph.D., Department of Physics and Astrophysics, University of Delhi.

Thesis title: **Some aspects of non-perturbative quantum gravity in a two-form gauge theory.**

Field of Specialization under the Subject/Discipline:

Theoretical high Energy Physics; String theory, Quantum Field Theory, Gravitation.

Teaching at Miranda House since: Permanent faculty since March 10, 2023.

Total Publications (in referred journals): 06

List of Publications:

- **Exact geometries form boundary gravity**, Rohit K. Gupta, Supriya Kar, R. Nitish & Monika Verma, *International Journal of Theoretical Physics* **62**, 61 (2023).
- **Geometric torsion, 4-form, Riemann duals and quintessence**, R. Nitish & Supriya kar, *International Journal of Modern Physics D* **30** (02), 2150011 (2021).
- **Perspectives of perihelion precession in torsion modified gravity**, R. Nitish, Rohit K. Gupta & Supriya Kar, *International Journal of Modern Physics D* **29** (10), 2050074 (2020).
- **Aspects of gravitational wave/particle duality: bulk torsion \leftrightarrow boundary gravity correspondence**, Rohit K. Gupta, Supriya Kar & R. Nitish, *International Journal of Modern Physics D* **29** (02), 2050019 (2020).
- **CFT₆ bulk/boundary AdS₅^Q correspondence and emergent gravity**, R. Nitish, Deobrat Singh & Supriya Kar, *Physics Scripta* **94**, 075301 (2019).



Miranda House

UNIVERSITY OF DELHI

- **Mass generation from a non-perturbative correction: massive Neveu-Schwarz field and graviton in (3+1) dimensions**, R. Nitish & Supriya Kar, *Progress of Theoretical and Experimental Physics* **043B02** (2019).

Seminars/Workshops/Conferences attended:

- **Summer School on Superstring Theory and Related Topics**, August 24, 2020-September 4, 2020, *International Centre for Theoretical Physics, Trieste, Italy*.
- **National Strings Meeting (NSM)**, December 22-27, 2019, *Indian Institute of Science Education and Research (IISER), Bhopal, Madhya Pradesh, India*.
- **Indian Strings Meeting (ISM)**, December 16-21, 2018, *Indian Institute of Science Education and Research, Thiruvananthapuram, Kerala, India*.
- **International Conference on New trends in Field Theory**, November 25-30, 2018, organized by *DST-CIMS & Department of Physics, Institute of Science, Banaras Hindu University, Varanasi-221005, India*.
- **Student Talks in Trending Topics in theory (ST⁴)**, July 6-24, 2018, *National Institute of Science Education and Research (NISER), Bhubaneswar, Odisha, India*.
- **International Conference on New Trends in Cosmology**, April 06-08, 2018, *Banaras Hindu University, Varanasi, India*.
- **25th International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY)**, December 10-15, 2017, *Tata Institute of Fundamental Research (TIFR), Mumbai, India*.
- **National Strings Meeting (NSM)**, December 05-10, 2017, *National Institute of Science Education and Research (NISER), Bhubaneswar, Odisha, India*.
- **School and Workshop on Modular Forms and Black Holes**, January 05-14, 2017, organized by *The Centre for Fundamental Studies (CFS), National Institute of Science Education and Research (NISER), Bhubaneswar, Odisha, India*.
- **Indian Strings Meeting (ISM)**, December 15-21, 2016, *Indian Institute of Science Education and Research (IISER), Pune, Maharashtra, India*.
- **International Conference on New Trends in Field Theories**, November 06-10, 2016, organized by *DST-CIMS & Department of Physics, Institute of Science, Banaras Hindu University, Varanasi 221005, India*.