

## About the Institute

National Institute of Technology (NIT) Rourkela is a prestigious institution of national importance, which is fully funded by the Ministry of Education. The institute is recognized as one of the leading national-level institutions for technical education in India. Its primary objective is to produce highly skilled and competent engineers and scientists through its graduate, post-graduate, and doctoral programs in various branches of Engineering and Science. NIT Rourkela has been recognized for its excellence in education and research, and it has consistently been ranked highly in prestigious rankings. According to the Times Higher Education World University Rankings of 2018, NIT Rourkela was ranked 601-800 globally and 126th in Asia. Moreover, it has been ranked 15th among engineering colleges in India by the National Institutional Ranking Framework (NIRF) in 2022. For further information about the institute, please visit our website at [www.nitrkl.ac.in](http://www.nitrkl.ac.in).

## About the Department

The Department of Physics at NIT Rourkela was established in 1961 and has since been making significant progress in the field of education. The department is known for providing high-quality education in undergraduate and postgraduate studies, as well as PhD and M.Tech (Research) programs. Presently, the department is actively engaged in research activities that cover a range of fields, including astrophysics, astronomy, functional material, low-temperature physics, soft matter and polymer physics, and theoretical physics. These research activities are conducted by renowned researchers and scholars who are committed to advancing the boundaries of knowledge in their respective fields.

## Sponsoring Organization



# Workshop on Bridging the Gaps: Interdisciplinary Collaborations in Constraining the Physics of Finite Nuclei, Neutron Stars, and Dark Matter

*(Hybrid mode)*  
*(03-07 July, 2023)*

## About the workshop

This workshop focuses on constraining the physics of finite nuclei, neutron stars, and dark matter. Experts from diverse fields will gather to discuss the latest theoretical and experimental advancements in understanding these intriguing phenomena. By exploring nuclear physics, astrophysics, and cosmology, we aim to accelerate our understanding of the fundamental laws governing matter at different scales, shedding light on the mysteries of the universe.

## Organizing Committee

### Patron:

Prof. K. Umamaheshwar Rao,  
Hon. Director, NIT Rourkela

### Chairman:

Prof. Prakash Nath Vishwakarma,  
Department of Physics and Astronomy, NIT Rourkela

### Convenor:

Dr. Bharat Kumar, Assistant Professor,  
Department of Physics and Astronomy, NIT Rourkela

## Student co-ordinators

Mr. Pinku Routaray, Research Scholar  
Mr. Sayantan Ghosh, Research Scholar  
Mr. Probit J. Kalita, Research Scholar

## Organized by

Department of Physics and Astronomy,  
National Institute of Technology Rourkela,  
Odisha, India-769008

## Speakers

- Prof. S. K. Patra
- Prof. Bedangadas Mohanty
- Prof. Grigoris Panotopoulos
- Prof. B. K. Agrawal
- Prof. Kazuyuki Sekizawa
- Prof. Luciano Rezzolla
- Prof. Debarati Chatterjee
- Prof. Takashi Nakatsukasa
- Prof. Sarira Sahu
- Prof. Tanja Hinderer
- Prof. Ritam Mallick
- Prof. Ang Li
- Dr. Sophia Han
- Dr. Bhaskar Biswas
- Dr. Tianqi Zhao
- Dr. H. C. Das
- Dr. Chiranjib Mondal
- Dr. Tuhin Malik

## Target Participants

The PG/Ph.D. students have the option to attend the program in a hybrid mode, allowing for both in-person and online participation.

## Accommodation

Accommodation can be arranged for outside participants at NIT guesthouses and hostel on a payment basis (Twin sharing) based on availability. No TA/DA will be provided.

## Registration link

Please note that the deadline for filling out the registration form is June 15th, 2023. Selected participants will be notified by email no later than June 20th, 2023. The Google link for registration is <https://forms.gle/do6C5GNPU4DecQCz6>.



## Address for Communication

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