



Workshop on GRAVITATIONAL WAVES & LIGO INDIA



27th November to 1st December 2023

Organised by Inter University Centre for Astronomy and Astrophysics Pune
and Goa University

About the workshop:

The era of gravitational wave astronomy has revolutionized our understanding of the universe. This workshop endeavours to instill a deep understanding of gravitational wave physics and data analysis techniques among participants, equipping them with the skills needed to understand and explore these groundbreaking discoveries. Featuring a series of lecture sessions covering the fundamentals of gravitational wave physics: general relativity, source modelling, basics of search and parameter estimation and detectors, will furnish participants with a profound understanding of the theoretical foundations and cutting-edge methodologies underpinning gravitational wave research. The heart of this workshop lies in its practical sessions. From data analysis to instrumentation, they will gain tangible skills to contribute meaningfully to ongoing and future research. With LIGO-India set to become a critical player in the global gravitational wave network, this workshop is a unique opportunity for participants to connect with this ambitious project. They will learn about the cutting-edge technologies and research opportunities it offers.

About the Organizing Institutions

Goa University

Goa University was established under the Goa University Act of 1984 and commenced operations on 1 June 1985. The university provides higher education in the Indian state of Goa. It is located on Taleigao Plateau overlooking Zuari estuary on a picturesque campus spread over 402 acres with state-of-the-art infrastructure. The University, on its campus, has 10 schools. The formation of schools has been done at the start of the academic year 2019-20 with amalgamation of traditional departments to allow organic evolution of new courses. They offer programmes leading to Undergraduate degree (3), Masters degree (35) and Ph.D. degree (25) in various disciplines.

IUCAA-Pune

The Inter-University Centre for Astronomy and Astrophysics (IUCAA) is an autonomous institution under the University Grants Commission (UGC) of India to promote the nucleation and growth of active groups in astronomy and astrophysics at Indian universities. IUCAA's activities fall under two broad programmes: core academic programmes, which include basic research, the Ph.D. programme, advanced research workshops and schools, the giant metre-wave radio telescope, and guest observer programmes; and the visitor academic programmes, which include the visitor and associates programme, refresher courses for teachers.

Who can participate:

The workshop is meant for postgraduate/Engineering students interested in GW astronomy. A small number of highly motivated final-year undergraduate students will be considered. Background in gravitational wave astronomy is preferred.

How to apply

Upcoming workshop details can be found at : <http://astrosat-ssc.iucaa.in/workshops>

Apply here : <http://surl.li/lmtgu>

Important Deadlines

Participation Limit : 40 who will be provided travel sleeper class funds, boarding and lodging

Duration of workshop: 27thNov-1st Dec 2023

Last date to submit application: 15 October 2023

Selected applicants will be informed by : 20 October 2023

Coordinators: IUCAA: Dr. Apratim Ganguly, email id: apratim@iucaa.in

Goa University: Dr. Reshma Raut Dessai, email id: reshma@unigoa.ac.in

Venue : School of Physical and Applied sciences, Goa University, Goa