

Seminar

Institute for Plasma Research

Title: Understanding LIGO Data (GW150914) using Undergraduate Physics
Speaker: Prof. Sudip Sengupta
Institute for Plasma Research, Gandhinagar
Date: 19th December 2025 (Friday)
Time: 03:30 PM - 5.00 PM
Venue: Seminar Hall, IPR

Abstract

The detection of gravitational Waves by LIGO collaboration on 14th Sept. 2015, represents the first direct confirmation of Einstein's prediction of gravitational radiation by accelerating massive objects. It is the most sensitive measurement ever made in the history of Science. The year 2025 marks not only the completion of a decade since this groundbreaking discovery but also roughly a decade since IPR joined the LIGO collaboration. In this talk, I will present an understanding of LIGO data (GW150914) based entirely on undergraduate level physics without the use of general relativity. This talk is inspired by several articles published after the LIGO discovery in journals at the undergraduate level.
