

## CDISE Seminar

# LIGO SEARCH ALGORITHMS THAT DETECTED GRAVITATIONAL WAVES FROM THE MERGER OF BINARY OBJECTS

**Satya Mohapatra**

LIGO Laboratory, MIT

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Skolkovo Innovation Center

1 Nobel Street (TPOC-4, Red Building), Room 351



### ABSTRACT

There have been discoveries of gravitational waves from the collisions of several binary black holes and from a collision of binary neutron star, observed by Laser Interferometer Gravitational-wave Observatory. There are dedicated algorithms with complementary approach that are deployed for such detections. In this talk Satya Mohapatra will give a quick review of such algorithms, while describing the necessary computing that goes for it, and then will give an outline of some future developments.

### Short BIO

Satya Mohapatra did his PhD at University of Massachusetts - Amherst specializing on gravitational-wave data analysis. He was a postdoc at Syracuse University and Rochester Institute of Technology. Currently he is a technical staff at LIGO Laboratory, MIT. His main research focus includes search algorithms for detecting gravitational-waves from merger of compact binary and LIGO computing infrastructure.