



LIGO-India: Beyond the discovery of Gravitational waves

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The historic discovery of gravitational waves through direct detection by the LIGO observatories in the USA, in principle, opens up a new window for astronomy. In practice, however, the full exploitation of Gravitational wave astronomy will await the global array of LIGO like observatories, including the planned LIGO- India observatory recently flagged off by the Union cabinet of India. I will review the momentous discovery, the potential of gravitational-wave astronomy, and the promise and current status of LIGO-India.

References

B. P. Abbott *et al.* (LIGO Scientific Collab. and Virgo Collab.) Phys. Rev. Lett. 116, 061102

LIGO-India webpage <http://www.gw.iucaa.in/ligo-india/>

The LIGO-India proposal https://dcc.ligo.org/public/0075/M1100296/002/LIGO-India_lw-v2.pdf

Figure 1

Engineering concept design of LIGO-India at one of the shortlisted sites in India showing the actual terrain data obtained from SAC, ISRO [Courtesy: TCE, India].

