

Colliding compact objects and gravitational wave astronomy

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The spectacular observation of collision of two black holes in distant Universe in the year 2015 marked the beginning of gravitational wave astronomy. In the last 5 years, the interferometric gravitational wave detector network with LIGO and Virgo detectors has observed 50 compact binary mergers, the majority being black hole binaries. This, by far, surpasses the stellar mass black holes observed in X-ray astronomy till date. These observations are not only unraveling mysteries of compact objects and our Universe but also pose new challenges regarding black hole formation. The talk will focus on the recent results from LIGO-Virgo gravitational wave detections.