

# **The (glorious) past, (exciting) present and (foreseeable) future of gravitational wave detectors.**

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The first trace left by a gravitational wave in a man-made detector in September 2015 marked the birth of gravitational wave astronomy. Less than four years from that first signal, gravitational wave detections have become routine, the LIGO and VIRGO instruments are standing up to their mission of being “observatories” and the trove of signals collected is enabling exciting new science and multi-messenger astronomy. And yet, the gravitational wave community has plans to expand the band, reach and sensitivity of detectors even further.

I will quickly review the experimental basis of gravitational wave detection, the status of the current detectors with highlight on the most significant detections performed so far, and try to shed some light on what’s coming next.

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