# Modelling gravitational waves in general relativity and beyond

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The analytical modelling of gravitational waves in general relativity has been one of the key elements to allow the numerous detections by the LIGO-Virgo-KAGRA collaboration. Extending those results to alternative theories of gravity is crucial to test our gravitational paradigm at an unprecedented precision with next generation detectors, such as the Einstein Telescope and the space-based interferometer LISA. In this talk, I will review the current status of analytical gravitational wave modelling both in general relativity and alternative theories of gravity.