

# Beyond the horizon: The status and future of gravitational-wave source modelling in general relativity

*Monday, 16 September 2024 10:00 (50 minutes)*

This is an overview talk that will outline the progress that has been made in modelling the gravitational-wave signal emitted by coalescing compact binaries. I will briefly introduce the key paradigms and modelling techniques that have led to the successful construction of numerous waveform models before discussing some of the challenges that we face as we transition to the next generation of gravitational wave detectors. Where possible, I will highlight new avenues of exploration that are yielding novel insights into the behaviour of compact binaries in the strong-field regime.

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