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**Interfacing analytical- and numerical relativity for gravitational-wave astronomy<sup>1</sup>**

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Binary black-hole coalescences – some of the most energetic events in the Universe – are also among the most promising sources for the first direct detection of gravitational waves (GWs). The recent progress in analytical- and numerical relativity has enabled us to model the coalescence of binary black holes accurately. This has important implications in GW astronomy: Firstly, this will dramatically improve the sensitivity of the searches for GWs from binary black holes, and hence the expected detection rates. Secondly, this will significantly enhance our ability to estimate the source parameters, thus making GW observations an excellent astronomical tool. This talk will summarize the status and prospects of interfacing analytical- and numerical relativity, and its implications in GW astronomy.

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