

## **Enhancing gravitational waveform models**

Fast and accurate binary merger waveform models which span wide parameter ranges are crucial for future searches and parameter estimation of gravitational-wave data. To date, analytical waveforms that incorporate numerical-relativity information, such as effective-one-body and phenomenological models, play an important role in the analysis of LIGO and Virgo data. However, these models are not automatically updated every time new numerical waveforms become available. Here we present a new perspective how to dynamically tune waveform models by incorporating sparse information from a more accurate model. We also show first attempts to use our method to include additional physical effects that were not present in the original model, and review the status and challenges.