

# Numerical Simulations of Binary Black Hole Encounters

*Monday 11 December 2023 14:00 (30 minutes)*

Binary black holes are the most numerous source of observed gravitational waves (GW). Precise knowledge about the interaction between two black holes and the emitted GWs are of high importance for finding and analysing GW signals, as well as to deepen the understanding of the structure and solutions of Einstein's equations. In this talk, I summarize the contributions of Numerical Relativity simulations to GW astrophysics, touching on all types of orbits (quasi-circular, eccentric, hyperbolic). Emphasis will be on results obtained with the SpEC code of the SXS collaboration.

**Primary author:** PFEIFFER, Harald (AEI Potsdam)

**Presenter:** PFEIFFER, Harald (AEI Potsdam)

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