



Anatomy of a binary neutron star merger

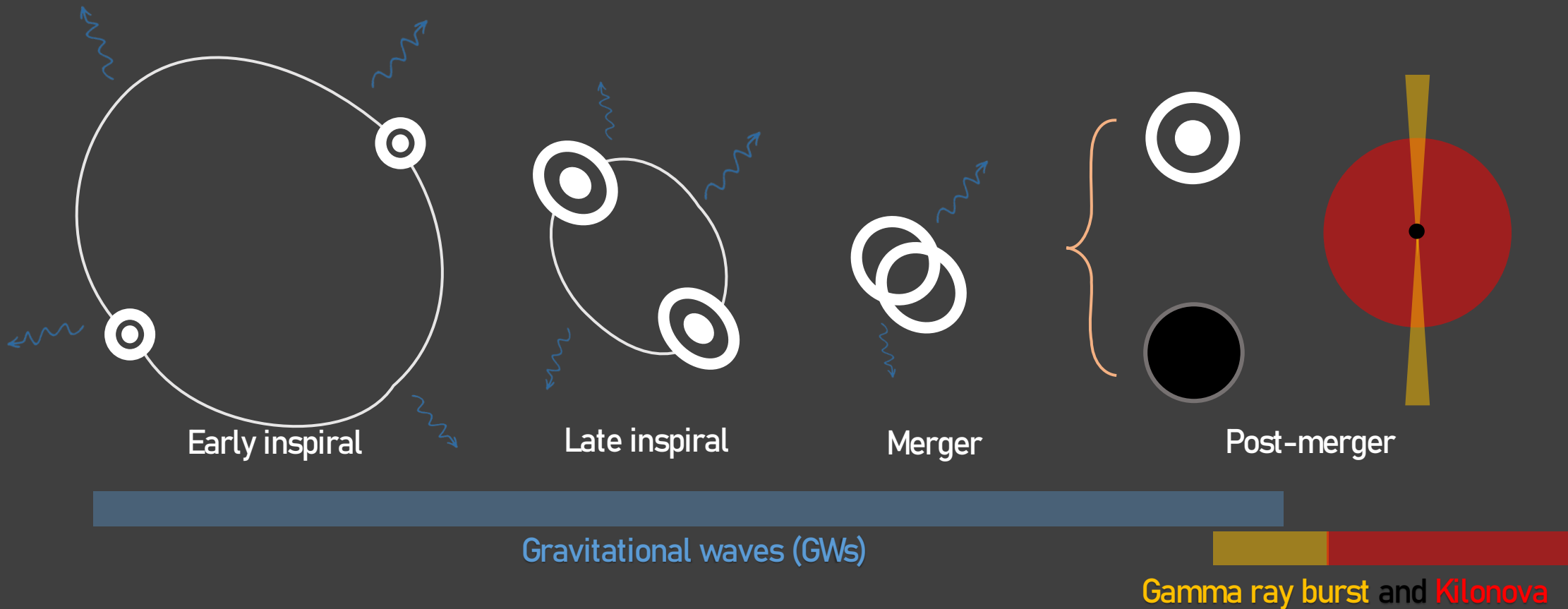
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Motivation



Neutron stars are extremely compact

We don't really know what happens at the densities reached in the core



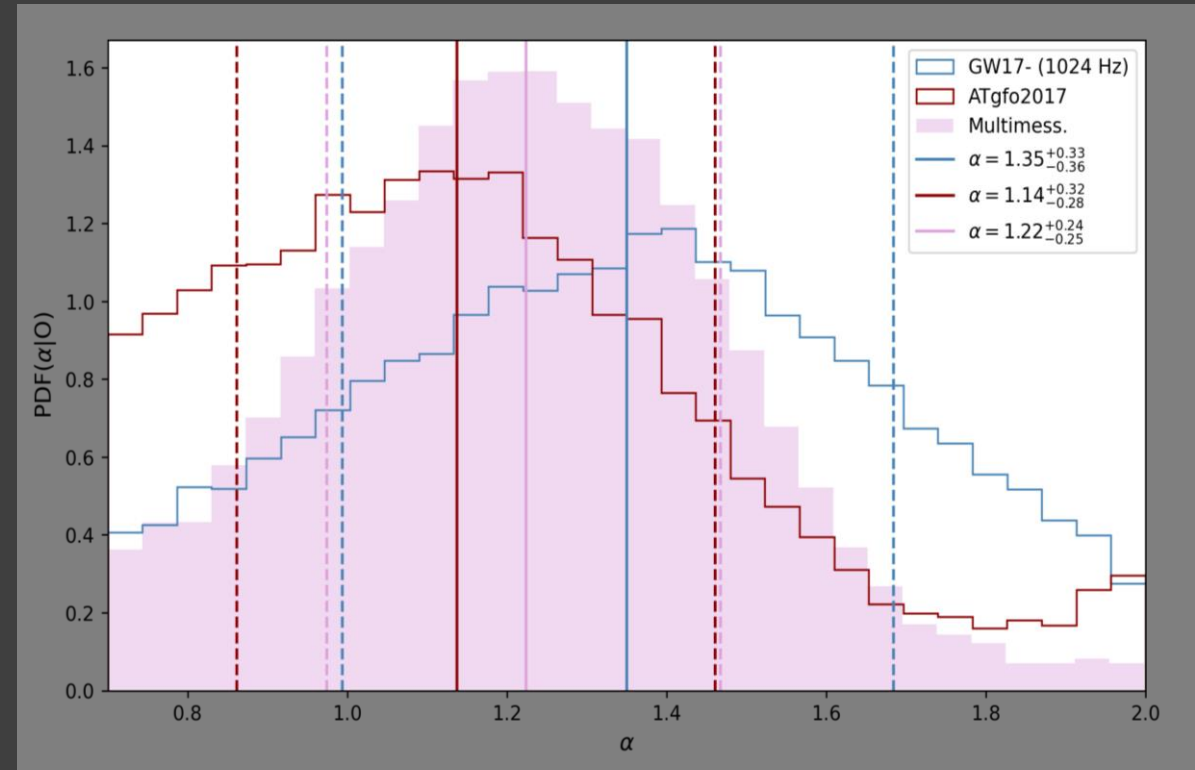
As compact as the Earth (if you could fit it in the palm of your hand!)

Idea

Can we infer the properties of nuclear interactions from the GW and kilonova emission of these mergers?

(Part of) My work

- Probe a toy nuclear model against the multimessenger data of GW170817
- Design a numerical pipeline that combines the constraints given by the GW and the kilonova emission



Next project



Stay tuned!



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Thank you for the attention!