

Section on “late Universe” sources

Astrophysical systems

3.2 Late Universe 12

3.2.1 Neutron star mergers 12

- Section name could become: “Astrophysical systems”
- [D. Blas] There is also the new source at MHz from NS mergers <https://arxiv.org/abs/2210.03171> (frequency-shift from kHz, expected amplitude of the signal, multi-band with ground-based interferometers, directionality, SGWB?)
- AGN
- Disk around BHs
- Fast radio burst
- Supernova, hypernova <https://inspirehep.net/literature/1710112> |
- Neutron star collapse (after merger) <https://arxiv.org/abs/1110.4442>, <https://arxiv.org/abs/1612.06429>, <https://arxiv.org/abs/1807.03684>, <https://inspirehep.net/literature/2668024>,

Light PBH mergers

3.2.2 Mergers of light primordial black holes

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- Eq. (25): Change Mpc^{-3} to Gpc^{-3} (typo, see also Ref [28]). fixed in arxiv version but not in journal version.
- update merging rate prescriptions (with unequal mass ratios, mergers in clusters) and include continuous waves from light inspiralling PBH binaries
- hyperbolic encounters (<https://arxiv.org/abs/1706.02111> , relation frequency-mass and rates <https://arxiv.org/abs/1711.09702> , rate evolution with redshift)
- Discussion on Intrinsic signal duration
- Include possible GW backgrounds from PBHs BBH and CHE

Exotic compact objects

3.2.3 Exotic compact objects

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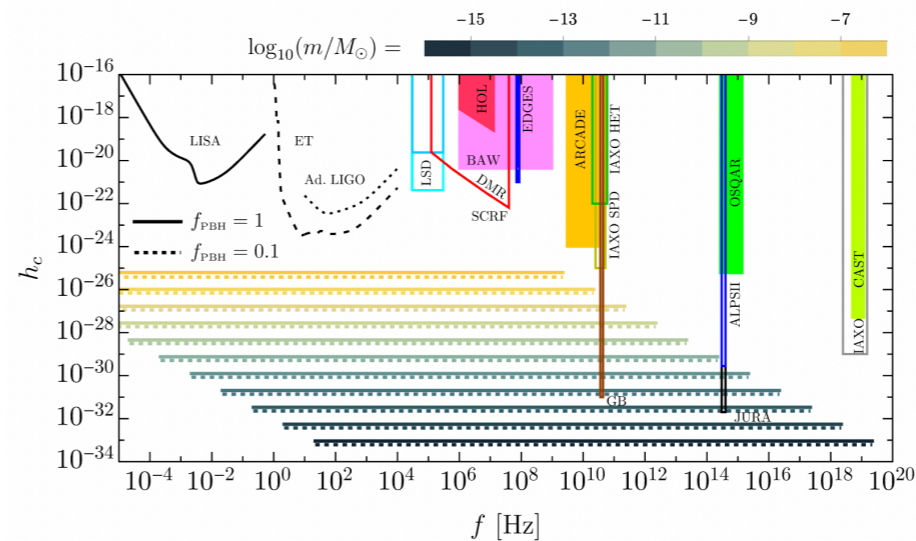
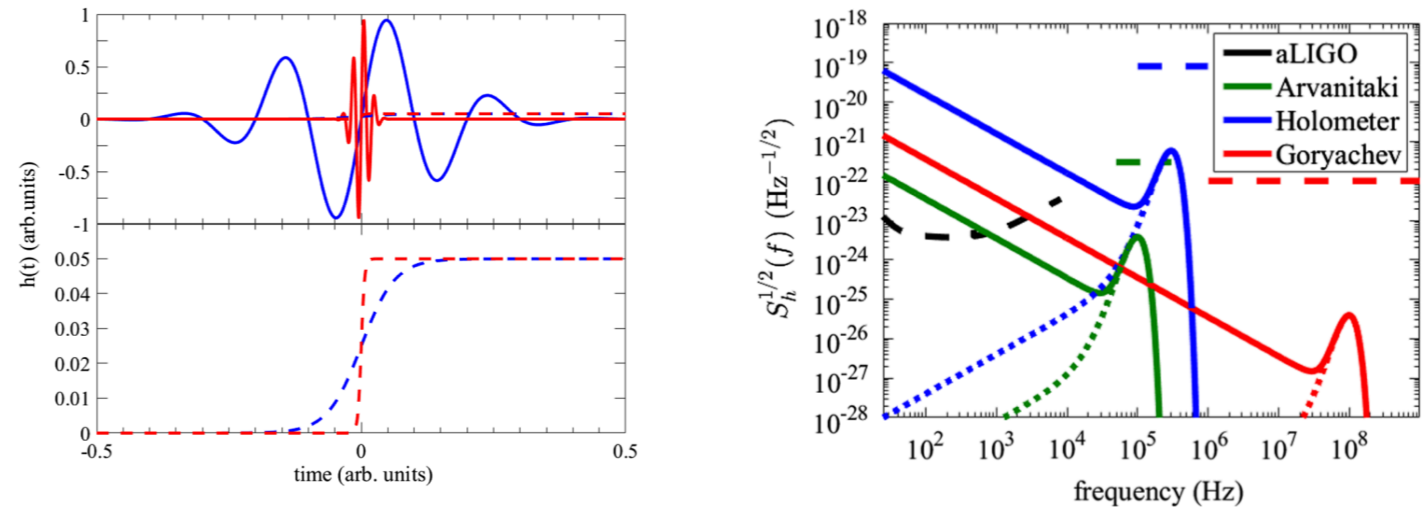
- Connection to fundamental fields (?), do we understand the cosmology of these ECO.

3.2.5 (New subsec.) Memory effect. Signal left from mergers and hyperbolic encounters

(<https://arxiv.org/pdf/2307100915.pdf>)

Non-linear memory from mergers

McNeill, Thrane and Lasky, Phys. Rev. Lett. 118 (2017) no.18, 181103
[arXiv:1702.01759]



- Memory for hyperbolic encounters
- Other sources?
- How do we compute the sensitivity for UHF experiments