ID de Contribution: **81** Type: **COSMOLOGIE**

Constraining the Hubble constant and modified GW propagation with LIGO/Virgo dark sirens and galaxy catalogs

mercredi 31 mars 2021 15:15 (15 minutes)

I will present the methodology for constraining the Hubble parameter and modified GW propagation with "dark sirens"(namely, compact binary coalescences without an electromagnetic counterpart) and galaxy catalogs.
I will introduce in particular some relevant improvements to the treatment of the latter, such as their completeness, and discuss the correct treatment of selection bias. I will then show results that make use of the recent GWTC-2 catalogue, presenting the most accurate measurement of H0 from dark sirens alone, new bounds on modified GW propagation, commenting on the role of EM counterparts and discussing relevant systematics and the interplay with astrophysical parameters.

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