Contribution ID: **43** Type: **not specified**

Testing Cosmology with Gravitational Waves

Thursday 28 May 2020 15:45 (50 minutes)

As we enter the era of precision cosmology, the behavior of gravity on large scales and the nature of the main constituents of the universe still remain debatable. Future data from the Cosmic Microwave Background and galaxy surveys, along with the advent of gravitational waves (GW) will provide us precise constraints that will help uncover some cosmological puzzles.
In this talk, I will focus on testing the nature of dark energy with GW. I will show how we can generically study possible modifications to the concordance LCDM model in a unified manner, and discuss how GW are affected. Then, I will show how these modifications can be constrained with observations of binary neutron stars and discuss results for LIGO.

Presenter: LAGOS, Macarena

Session Classification: session IV