

Probing the inflationary particle content with gravitational waves

mercredi 31 mars 2021 14:00 (15 minutes)

I will highlight the immense discovery potential on early universe physics stemming from gravitational wave probes. To this aim, I will survey two approaches to inflation, from the particular (axion inflation models) to the general (an EFT approach).

I will show how a characterisation of the GW signal that includes (i) frequency profile, (ii) chirality, (iii) higher-point functions, (iv) anisotropies, will deliver invaluable information on the inflationary particle content.

Upcoming gravitational wave probes hold the key to turn inflationary observables into a direct portal to high energy physics.

Auteur principal: FASIELLO, Matteo (IFT UAM-CSIC, Madrid)

Co-auteurs: Prof. WANDS, David (ICG Portsmouth); Prof. DIMASTROGIOVANNI, Ema (Groningen and UNSW)

Orateur: FASIELLO, Matteo (IFT UAM-CSIC, Madrid)

Classification de Session: Contributed talks: Cosmology