



Contribution ID: 349

Type: **Talk**

Gravitational waves in a bigravity model: from inflation to present

Wednesday 16 December 2015 16:55 (20 minutes)

In this talk, a detailed analysis of the evolution of tensor perturbations in a cosmological background for a model of Hassan-Rosen theory of bigravity is presented. It is shown that gravitational waves are unstable in this setting, but also that in practice the amplitude of tensor perturbations generated during inflation is sufficiently suppressed to avoid this instability from showing up until today. Hence, this bigravity model cannot be excluded from a pure analysis of the tensor sector. However, stringent limits on inflation from vector and scalar perturbations are derived.

Author: GUARATO, Pietro (Université de Genève)

Co-authors: CUSIN, Giulia (University of Geneva); MOTTA, Mariele (University of Geneva); DURRER, Ruth (University of Geneva)

Presenter: GUARATO, Pietro (Université de Genève)

Session Classification: 03 - Modifications of gravity