## Phenomenology 2021 Symposium



Contribution ID: 1273

Type: Cosmology

## Gravitational waves from first-order phase transition during inflation

Tuesday 25 May 2021 17:00 (15 minutes)

Abstract: During the inflation era, the properties (such as mass and interactions) of the fields coupled to the inflaton field may change substantially. As a result, drastic phenomena, such as first order phase transitions, may happen. In this talk, I will present simple models that first-order phase transition can happen and finish during inflation. I will discuss the properties of the gravitational wave (GW) signals produced by first-order phase transitions during inflation. I will show that there is a unique oscillatory feature in the GW spectrum. I will also show that we may be able to observe directly such a signal through future terrestrial or spatial GW detectors.

## Summary

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Session Classification: Cosmology IV