

## Winter Meeting 2024



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# Emission of gravitational waves from strongly-coupled plasmas

*Wednesday, 7 February 2024 14:55 (25 minutes)*

I explore the strong-coupling effects on the emission of primordial gravitational waves. I start by analyzing the emission from a primordial plasma in thermal equilibrium, both in the weakly-coupled and in the strongly-coupled regimes. Additionally, I overview the emission of gravitational waves resulting from first-order cosmological phase transitions. Traditionally, the dynamics of these transitions are expected to occur via bubble nucleation, with the collision between bubbles generating gravitational waves. However, spinodal instability is starting to be considered as an alternative mechanism to realize the phase transition. I address both scenarios and the insights into distinguishing the spectra emitted by each of them.

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