

Pick any two? Baryogenesis, gravitational waves and thermal phase transitions

Tuesday 13 September 2016 15:00 (20 minutes)

Gravitational waves are a promising new observational tool, not only for astrophysics but also for cosmology. In various extensions of the Standard Model the phase transition can be first order, and could produce copious gravitational waves from bubble collisions. Other possibilities, such as a tachyonic transition at the electroweak scale, produce a more subdued signature at higher frequencies. This talk will summarise numerical results of gravitational wave production from first-order phase transitions, as well as from tachyonic transitions. The prospects of detection and the compatibility with various models of baryogenesis will also be briefly discussed.

Summary

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