

# Search for cosmological phase transitions through their gravitational wave signals

*Monday, 6 November 2023 10:30 (30 minutes)*

We are currently witnessing the dawn of a new era in astrophysics and cosmology, started by the first LIGO/Virgo/KAGRA observations of Gravitational Waves (GW). Very recently, also the detection of a stochastic background of GWs at very low frequencies was announced by the Pulsar Timing Array collaborations. In this talk, I will discuss how such signals are produced in cosmological phase transitions examine the possible implications of current data for this source as well as the prospects for detection in the upcoming next generation of GW experiments.

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**Session Classification:** Opening & Morning session