

# Whispers from the Dark Universe - Particles & Fields in the Gravitational Wave Era

CLUSTER OF EXCELLENCE  
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DESY THEORY WORKSHOP

## WHISPERS FROM THE DARK UNIVERSE – PARTICLES & FIELDS IN THE GRAVITATIONAL WAVE ERA

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## Impact of non-standard interactions on low-scale leptogenesis and neutrinoless double beta decay

*Wednesday 25 September 2024 15:45 (15 minutes)*

In this talk, we investigate the interplay between the observation of lepton number violating processes and the generation of the baryon asymmetry of the Universe via low-scale leptogenesis. We focus on the impact of non-standard interactions, beyond the usual Majorana mass term, on the observation of neutrinoless double beta decay and the resulting parameter space for successful leptogenesis. Parameterizing these effects in a model independent way, we showcase how additional operators can influence the final baryon asymmetry.

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