## Gravitational Waves from Gravitational Particle Production

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The excitation of scalar dark matter during inflation may result in large isocurvature perturbations, which can be avoided by inducing a sizable effective dark matter mass during the inflationary phase. This can be achieved by a direct coupling to the inflaton, through a nonminimal coupling to the curvature, or by a large bare mass. Notably, when the isocurvature is suppressed at CMB scales, a peak arises at small scales, corresponding to modes that leave the horizon near the end of inflation.

I will discuss how these large perturbations result in a stochastic gravitational wave background in the sensitivity range of existing and future gravitational wave observatories.

Author: GARCÍA GARCÍA, Marcos Alejandro (Instituto de Física, UNAM)

Presenter: GARCÍA GARCÍA, Marcos Alejandro (Instituto de Física, UNAM)

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