## Théorie, Univers et Gravitation



ID de Contribution: 4 Type: Non spécifié

## Gravitational portals in the early Universe

mercredi 5 octobre 2022 13:45 (25 minutes)

We present new results on gravitational matter production in the late time evolution of inflation, during coherent oscillation regime of the inflationary field, usually called "reheating". We consider the production of matter and radiation during reheating after inflation, restricting our attention to gravitational interactions, including minimal and non-minimal coupling to gravity. In particular, we consider the gravitational production of dark matter and production of radiation from inflaton scattering. In the latter, we derive a lower bound on the maximal temperature reached by the thermal bath in the early Universe and consider new perspectives for a purely gravitational reheating and leptogenesis.

Auteur principal: CLÉRY, Simon (IJCLab - Pôle théorie)

Orateur: CLÉRY, Simon (IJCLab - Pôle théorie)