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## Gravitational effects on inflaton decay

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Inflaton inevitably couples to all non-conformally coupled matters to gravity, through an oscillation in the Hubble parameter or the cosmic scale factor. This coupling leads to particle production during the inflaton oscillation regime even in the minimal (Einstein-Hilbert action + canonical inflaton) setup. In addition, such particle production due to the oscillation in the Hubble parameter can be more efficient in models with non-minimal inflaton couplings to gravity. I will illustrate scalar particle production and graviton production from the inflaton due to this mechanism.

### Summary

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