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## Effects of an early matter dominated era on gravitational waves induced by scalar perturbations

*Tuesday, 4 June 2019 14:30 (15 minutes)*

We revisit the effects of an early matter dominated era on gravitational waves induced by scalar perturbations. We carefully take into account the evolution of the gravitational potential, source of the gravitational waves, around the transition from an early matter dominated era to the radiation dominated era. As a result, we find that the induced gravitational waves can be suppressed or enhanced depending on the timescales of the transition. This talk will be based on our papers, arXiv:1904.12878, 1904.12879.

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