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## (G\*) Interaction of Gravitational waves with Yang-Mills waves

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Gravitational waves (GWs) provide a new window to observe the universe. Detecting GWs requires an understanding of the interaction of GWs with the matter. In this view, we discuss the interaction of gravitational waves with SU(2) Yang-Mills waves. In particular, we discuss how a Yang-Mills wave gets modified in the background of a gravitational wave. We also discuss some of the implications of the results in Early universe cosmology

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