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## Echoes of the Higgs: Gravitational Waves and the Fate of the Electroweak Vacuum

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We explore a minimal scenario where the Standard-Model Higgs is responsible for reheating the Universe after inflation and produces a significant background of gravitational waves. The characteristic features of such signal can be directly correlated to the classical stability of the electroweak vacuum, thus offering a novel connection between the inflationary scale and the top quark mass at energies scales inaccessible by current particle accelerators.

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