

# How fast are the Higgs-phase bubbles?

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The Higgs field's nonzero vacuum expectation value signals that the electroweak symmetry is spontaneously broken. In the early universe, if the primordial plasma reached temperatures above the electroweak scale, then this breaking would have occurred dynamically during the cosmological electroweak phase transition. I will discuss the speed of Higgs-phase bubble walls that would have developed during a first-order cosmological electroweak phase transition. Understanding the bubble wall speed is important if we seek to derive robust predictions for the various cosmological relics that may result from the EWPT, including gravitational wave radiation, dark matter, primordial magnetic fields, and the matter-antimatter asymmetry of the universe.

**Author:** LONG, Andrew (Rice University)

**Presenter:** LONG, Andrew (Rice University)

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