

## Higgs domain walls in the Standard Model and its extensions

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The study of the renormalization group improved effective potential of the Standard Model has revealed existence of a local maximum at field strengths of the order of  $10^{10}$  GeV. If the Standard Model is valid for very high energy scales, then the possibility of the production of cosmological domain walls in the early Universe occurs. We investigated dynamics of networks of domain walls using lattice simulations. We studied domain walls in the extensions of the Standard Model using the formalism of the Effective Field Theory. The energy spectrum of gravitational waves emitted from Higgs domain walls was determined.

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