

## **Scone – Simulations of cosmic networks**

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Immediately after the universe was “born” it went through a series of phase transitions. In these phase transitions topological defects, such as domain walls, magnetic monopoles or cosmic strings, may have formed. Cosmic strings are line-like, thin but dense objects that are the result of symmetry breaking. When the symmetry breaks, the Higgs potential falls into different orientations in different regions.

In this poster we focus on cosmic strings in non-Abelian gauge-Higgs field theory and discuss the two cases; necklaces and semipoles. The simulations in this poster are based on a  $960^3$  lattice, whereas the visualisations are done using VisIt to render a  $480^3$  lattice.