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## Cosmological constraints on the Higgs portal

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The new data from LHC, Planck and BICEP2 provide unseen possibilities for probing the early universe, its particle content and interactions between them. We study the cosmological constraints on a Standard Model extension with a real singlet scalar. I briefly introduce some of the main constraints on formation and decay of the scalar condensates in the early universe in order to consider the generation of dark matter abundance, both through freeze-out and freeze-in mechanism, and the generation of baryon asymmetry.

**Primary author:** Mr TENKANEN, Tommi (University of Helsinki and Helsinki Institute of Physics)

**Co-authors:** Prof. ENQVIST, Kari (University of Helsinki and Helsinki Institute of Physics); Dr TUOMINEN, Kimmo (University of Helsinki and Helsinki Institute of Physics); Dr NURMI, Sami (University of Helsinki and Helsinki Institute of Physics)

**Presenter:** Mr TENKANEN, Tommi (University of Helsinki and Helsinki Institute of Physics)

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