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# Interface of Particle Physics and Cosmology: Higgs Inflation Revisited

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Cosmic Inflation provides clues to the conditions of the early universe and the highest energy scales our universe has reached. Non-thermal relics can be produced through gravitational particle production, providing dark matter candidates or unstable particles that decay into the baryon asymmetry. A minimal framework that incorporates inflation into the Standard Model is Higgs Inflation, where the Standard Model Higgs or a variant, is identified as the inflaton. In this talk, I will describe the mechanism in which particle production occurs through Higgs Inflation and the aspects of this model which distinguishes it from other inflation models. I will also discuss the implications for dark matter production and the baryon asymmetry.

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