

Impact on BSM physics from S-matrix exclusion of de Sitter

We discuss how the consistency of S-matrix formulation of gravity excludes de Sitter vacua, both stable and meta-stable. In addition to nullifying an outstanding cosmological puzzle, by excluding any form of a constant from

the energy budget of our universe, this has profound implications for BSM physics. We explain how this finding forces the theta-parameter of QCD (or of any other gauge theory) to be unphysical and also review its implications for Higgs physics.

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