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Unimodular vs Nilpotent Superfield Approach to Pure dS Supergravity

Monday, 23 August 2021 23:15 (20 minutes)

I will present a novel solution to the long-standing issue of obtaining de Sitter spacetimes from a pure Supergravity theory. Our model is based on the first superspace formulation of unimodular gravity, in conjunction with a (super)-Stueckelberg construction. I will then present a comparison between our model and other proposals in the literature, based on constrained superfields. Even through the approaches are very different, I will show that the two proposals converge towards the same theory, thus offering a tantalising glimpse of a more general framework.

[Based on JHEP 01 (2021) 146 and Proc.Roy.Soc.Lond.A 476 (2020) 2237, 20200035]

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