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*** Withdrawn *** Cuscuton Bounce (G)*

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In general relativity producing a regular bounce entails violation of Null Energy Condition for a dynamical source in the model. That generically indicates existence of ghosts or other instabilities. However, in cuscuton modification of gravity, the correspondence between a background bounce and violation of Null Energy Condition for dynamical sources is broken. Cuscuton is an Infra Red modification and it can make the background go through a regular bounce. At the same time, since it does not contain any dynamical degrees of freedom, it does not lead to ghosts or other instabilities. Here, we present a toy scenario of a regular bouncing cosmology and prove this claim. Our model is presented as a proof of concept at this point and does not aim to explain observations in late time cosmology.

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