

Regularized pole inflation and Einstein-Cartan gravity

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The latest observation from ACT on the scalar spectral index n_s on the cosmic microwave background (CMB) favors a larger value than previous results. To account for this, we propose a class of inflation models, dubbed regularized pole inflation, with a regularized second order pole in the kinetic term of the inflaton which can increase n_s and fit the new data. The regularized pole inflation also exhibits attractor behavior as long as the regulator is small. Such kind of kinetic structure can be naturally realized in the Einstein-Cartan framework.

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