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## An Early Cyclic Universe<sup>1</sup> WILLIAM DUHE, TIRTHIBIR BISWAS,

Loyola University of New Orleans — We provide a comprehensive numerical study of the Emergent Cyclic Inflation scenario. This is a scenario where instead of traditional monotonic slow roll inflation, the universe expands over numerous short asymmetric cycles due to the production of entropy via interactions among different species. This is one of the very few scenarios of inflation which provides a nonsingular geodesically complete space-time and does not require any "reheating" mechanism.

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