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Palatini NMDC gravity : cosmological scalar field phase portraits in exponential potential

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We consider cosmological scalar field evolving under exponential potential of the Non-minimal Derivative Coupling (NMDC) gravity model in Palatini formalism. Slow-roll regime is assumed. GR and metric formalism NMDC cases are compared in this study. Phase portraits show that Palatini NMDC effect restricts acceleration phase into smaller region in the phase space. NMDC effect of the Palatini case enhances rate of expansion to larger than that of the GR and of the metric formalism cases.

Primary authors: Mr MUHAMMAD, Candrasyah (The Institute for Fundamental Study, Naresuan University); Mr SAICHAEMCHAN, Somphoach (The Institute for Fundamental Study, Naresuan University); Dr GUMJUDPAI, Burin (The Institute for Fundamental Study, Naresuan University)

Presenter: Mr MUHAMMAD, Candrasyah (The Institute for Fundamental Study, Naresuan University)

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