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General relativity with a positive cosmological constant Λ as a gauge theory

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In the paper we show that the general relativity action (and Lagrangian) in recent Einstein-Palatini formulation is equivalent to the action (and Langrangian) of a gauge field.

We begin with a bit of information of the Einstein-Palatini (EP) action, then we present how Einstein fields equations can be derived from it. In the next section, we consider Einstein-Palatini action integral for general relativity with a positive cosmological constant Λ in terms of ''corrected curvature" $\hat{F}$. We will see that in terms of $\hat{F}$ this action takes the form typical for a gauge field. Finally, we give a geometrical interpretation of the curvature $\hat{F}$.

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