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Teleparallel gravity from the principal bundle viewpoint

Since General Relativity is a classical gauge gravitational theory of diffeomorphisms, a natural question arises: does the same hold for TEGR?

In this talk, we explore the gauge structure of TEGR from the perspective of principal bundles. We also focus on the popular claim that TEGR can be viewed as a gauge theory of translations. It is explained that the standard way of approaching this claim, using the principal $T(4)$ -bundle endowed with a translational connection, leads to inconsistencies. We suggest an alternative approach based on the affine group and affine bundles with affine connections, resulting in a consistent formulation of TEGR.

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