

The Poincaré gauge theory of gravity has been one of the corner stones for many ultraviolet modifications of gravity within string theory and supergravity. The finite derivative description of Poincaré gauge gravity has been known up to quadratic in curvature. In this talk I will present the novel features of the most general Poincaré gauge theory of gravity which includes metric and torsion fields up to infinite covariant derivatives. I will also show how the presence of such infinite derivatives can resolve the perturbative instability and ameliorates the singularities in both metric and in torsion.