

We present a noncommutative extension of Palatini–Holst theory on a twist–deformed spacetime. The twist deformation entails an enlargement of the gauge group, and leads to the introduction of new gravitational degrees of freedom. In particular, the tetrad degrees of freedom must be doubled, thus leading to a bitetrad theory of gravity. The model is shown to exhibit new duality symmetries. We study in detail the commutative limit of the model, focusing in particular on the role of torsion and non–metricity. The effects of spacetime noncommutativity are taken into account perturbatively, and are computed explicitly in a simple example. Connections with bimetric theories and the role of local conformal invariance in the commutative limit are also explored.