Perspective of Perihelia Precession in Torsion Modified Gravity

We revisit the Killing symmetries of the Schwrzschild geometry with a renewed interest to revel the constants of motion in the General Relativity (GR). A term (ML^2/r^3) in the effective potential on an equatorial plane is known to hint
at a quantum gravity phenomenon! However no exact geometry underlying the new conserved charge (ML^2) is known GR and in a lower or many higher dimensional Einstein gravity. In the context we show that the new conserved charge may source
a dynamical torsion correction leading to a 4-form field strength in a modified theory of gravity in higher dimensions. Interestingly the higher dimensional dynamical correction incorporates a non-perturbative quantum effect into the GR and elegantly explains the known precession of the perihelia along the azimuthal angle.

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