Christof Witte

PhD Student

A smart way to modify gravity

Authors: C. Witte

We show that the formidable task of constructing alternative tensorial theories of gravity including consistent matter couplings can be reformulated as a system of linear partial differential equations. This is achieved by incorporating the causal structure of a given system of matter field equations directly into the underlying gravitational dynamics described as an evolution of initial data on a suitable hypersurface.