

Abstract

Based on the knowledge from differential geometry, the generalized geometry is introduced. As a consequence of the symmetries in this new geometry, a B -field, known from the string theory, inherently emerges. Generalized metric based on ordinary metric tensor and the B -field will be established as well. This allows to construct connection in the framework of generalized geometry and develop a Riemannian generalized geometry. From this point, it is a straightforward way to the replacement of an ordinary scalar curvature by the generalized one in Einstein-Hilbert action. Obtained action closely resembles the supergravity action, especially the bosonic part.