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11D supergravity from the nonlinear realisation of E11

We build the non-linear realisation of E11 algebra in eleven dimensions and find the dynamical equations that follow from it. These equations are uniquely determined by the structure of the non-linear realisation and, when restricted to low levels, perfectly reproduce the equations of 11-dimensional maximal supergravity. We argue that the same non-linear realisation considered in different spacetime dimensions leads to corresponding maximal supergravity theories.