

# Kac-Moody Exceptional field theory

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General relativity and more generally supergravity solutions with commuting isometries admit hidden symmetries. Eleven-dimensional supergravity with more than six commuting isometries admits in particular exceptional group hidden symmetries E6, E7, E8, up to the Geroch type affine Kac-Moody symmetry E9. Following ideas of West, Hohm and Samtleben, we defined a formulation of eleven-dimensional supergravity with E11 Kac-Moody invariance in collaboration with Kleinschmidt and Sezgin. I will introduce this theory and explain how it provides an alternative formulation of maximal supergravity allowing for generalised geometries.