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# Yang-Baxter deformations and generalized supergravity

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Recently, there has been a fundamental and significant development about the Green-Schwarz (GS) formulation of superstring theory. In this formulation, the kappa-symmetry plays a central role to ensure the consistency of the theory. In 2016 Tseytlin and Wulff showed that the kappa-symmetry constraints of the GS superstring defined on an arbitrary background lead to a "generalized" supergravity, which contains an additional (non-dynamical) vector field, rather than the standard supergravity. This result indicates that we might have overlooked a potentially important ingredient in the low-energy effective theory of string theory for long time, and may open up new directions including phenomenology and cosmology. In this talk, I will briefly introduce the recent progress on the generalized supergravity by focusing upon Yang-Baxter deformations and non-geometric aspects.

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