

DFT in supermanifold formulation and group manifold as background geometry

Noriaki Ikeda[#]

(Affiliation:Department of Mathematical Sciences, Ritsumeikan University)

[#]Corresponding author: nikeda@se.ritsumei.ac.jp

Abstract: We present our analysis about background geometric structures of double field theory including fluxes in terms of supergeometry. The section condition (closure condition) is formulated as a coordinate independent cohomological condition. We formulate the DFT in a $GL(2D)$ covariant formulation. The formalism can be applied to a generalized Scherk-Schwarz compactification and a DFT on a group manifold. Moreover, a complicated geometric structure is reformulated as a simple generalized master equation. As a result of simplification, we have found a new generalized Bianchi identity.

References

- [1] U.Carow-Watamura, N.Ikeda, T.Kaneko and S.Watamura,
DFT in supermanifold formulation and group manifold as background geometry,
JHEP 1904 (2019) 002 [[arXiv:1812.03464](https://arxiv.org/abs/1812.03464) [hep-th]].