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Title: Cohomology and deformations of Courant-Dorfman algebras

Abstract: We introduce Courant-Dorfman algebras -- an algebraic generalization of Courant algebroids and a higher analogue of Poisson and Lie-Rinehart algebras. We give an explicit description of the cochains in the standard and deformation complexes of a Courant-Dorfman algebra, including formulas for the differentials, cup products and graded Lie brackets. We give an interpretation of the cohomology spaces in low degrees and explain the relation with the Stienon-Xu complex in this context.