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Deformations of vector bundle-valued Higgs bundles and L_{∞} -algebras

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In this talk we shall discuss some work in progress on obstruction spaces to deformations of Higgs bundles (over a smooth projective variety/ \mathbb{C}) with coefficients in a vector bundle. For that we shall use some parts of the theory of deformations via differential graded Lie algebras and L-infinity algebras.