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*Generalized Hitchin Connections with applications to quantization of Moduli Space of parabolic vector bundles*

We will review our approach to the generalization of Hitchin connection and demonstrate how it can be applied to construct a projectively flat connection in the bundle over moduli space of curves obtained by applying geometric quantization to the moduli spaces of parabolic vector bundles. For the case of genus zero and certain weights we recall our results that this projectively flat connection is projectively equivalent to the KZ-connection. The talk ends with a discussion of new results showing that our generalized Hitchin connection construction applies to the very general situation of arbitrary families of complex structures on symplectic manifold.