

# Noncommutative Dolbeault complexes on representation schemes

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## **Abstract**

We show that the schemes parametrizing homomorphisms of an algebra into an algebra scheme are equipped with a rich canonical differential geometry. It generalizes the integrable almost complex structure and enables us to construct an equivariant sheaf of dg algebras, generalizing the Dolbeault complex. We give examples when the represented algebra can be reconstructed (up to analytic equivalence) from this complex.