

Claudio Onorati:

Title: Some remarks on deformations of hyperholomorphic bundles

Abstract: in this talk I will recall the definition and main properties of hyperholomorphic bundles on hyperkahler varieties, and I will explain two results obtained jointly with F. Meazzini about the infinitesimal deformations of such objects. The first result states that the differential graded Lie algebra controlling the deformations of such a bundle is formal, i.e. quasi-isomorphic to its cohomology. The second result focuses on the space of hyperholomorphic connections and gives an explicit differential graded Lie algebra controlling the deformation functor of such connections.