

# Singular fibers of the Hitchin map

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**Abstract:** The Hitchin map is defined on moduli spaces of Higgs bundles. It is known to give rise to an algebraically integrable system: its generic fiber is Lagrangian and isomorphic to an Abelian variety. However, the singular fibers are much more subtle. In this talk, we describe all singular fibers, including the nilpotent cone, in some explicit examples. This is joint work with Frank Loray.