

Abstract

The Hitchin morphism is a map from the moduli space of Higgs bundles over X to the Hitchin base, where X is a smooth projective variety. This map is not surjective in general. Recently, Chen-Ngo constructed a closed subscheme of the Hitchin base, and conjectured that this subscheme is the image of the Hitchin morphism. In this talk, we will show that this is true when X is a smooth projective surface. This work is joint with Lei Song (SYSU).