

Seminar on Complex Analysis

Meeting 1989, 5th October 2009

lecture: **Quantification of the Hermitian-Einstein equation**

author: Julien Keller

We introduce a notion of balanced metrics for a holomorphic vector bundle on a projective manifold. We show that the existence of balanced metrics is equivalent to the Gieseker polystability of the bundle.

When there exists a Hermitian-Einstein metric on a bundle, we show that it can be approximated by a sequence of balanced metrics that are canonical objects. Our construction can also be done in a more general set up.