

An International Conference to
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ON THE BOGOMOLOV-UHLENBECK-YAU-SIMPSON
INEQUALITY FOR SEMISTABLE HIGGS BUNDLES

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Abstract: C. Simpson introduced the notion of Higgs bundles and proved an inequality of Bogomolov type for semistable Higgs bundles via the method of Kobayashi-Hitchin-Donaldson-Uhlenbeck-Yau. In this talk, I will give a purely algebraic proof of this inequality, by attaching a new vector bundle to a given Higgs bundle.