

# On a conjecture about curve semistable Higgs bundles

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A curve semistable vector bundle is a semistable bundle which remains semistable whenever restricted to a curve inside the base variety. It was proved by Nakayama that such bundles are precisely the semistable ones with vanishing discriminant. The same characterization is only conjectural for Higgs bundles, though it has been shown to be true for some classes of varieties. In this talk we will review the state of the art for this conjecture and prove it for K3 and Enriques surfaces.