Ann. Sc. Norm. Super. Pisa Cl. Sci. (5) Vol. XIII (2014), 1091-1113

Some old and new results about rigidity of critical metrics

GILLES CARRON

Abstract. We present a new proof of a recent ϵ -regularity of G. Tian and J.Viaclovsky. Our idea also provides a new proof of a classical result of M. Anderson about volume rigidity of Einstein manifolds. Eventually, we also obtain new rigidity results for critical metrics.

Mathematics Subject Classification (2010): 53C20 (primary); 58E11 (secondary).