The Dirichlet problem for a complex Hessian equation on compact Hermitian manifolds with boundary

DONGWEI GU AND NGOC CUONG NGUYEN

Abstract. We solve the classical Dirichlet problem for a general complex Hessian equation on a small ball in \mathbb{C}^n . Then, we show that there is a continuous solution, in pluripotential theory sense, to the Dirichlet problem on compact Hermitian manifolds with boundary that equipped locally conformal Kähler metrics, provided a subsolution.

Mathematics Subject Classification (2010): 53C55 (primary); 35J96, 32U40 (secondary).