1046-32-191   **Malgorzata S Stawiska*** (`stawiska@ku.edu`), 1460 Jayhawk Blvd., Lawrence, KS 66045, and **Maritza M. Branker** (`mbranker@niagara.edu`). *Weighted homogeneous pluripotential theory.*

We introduce a weighted version of the pluripotential theory on complex Kähler manifolds developed recently by Guedj and Zeriahi. We define a weighted pluricomplex Green function, prove its basic properties and study its behavior under holomorphic maps. For projective algebraic manifolds we also provide a homogeneous version of the weighted theory and generalize so-called Siciak's H-principle and some classical approximation results. (Received August 15, 2008)