

An ampleness criterion with the extendability of singular positive metrics

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Coman, Guedj and Zeriahi proved that, for an ample line bundle L on a projective manifold X , any singular positive metric on the line bundle $L|_V$ along a subvariety $V \subset X$ can be extended to a global singular positive metric of L . In this paper, we prove that the extendability of singular positive metrics on a line bundle along a subvariety implies the ampleness of the line bundle.

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