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Minimal Model and Adjunction Theory

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A quasi polarized variety is a pair (X; L), where X is a normal projective variety, with at most terminal singularities, and L is a nef and big Cartier divisor. In order to classify these pairs a useful and classical instrument is the study of the positivity (nefness) of the adjoint divisors, KX + rL, for a positive rational number r. After the celebrated proof of the existence of the Minimal Model Program with scaling, this could be done via such a Program, with scaling rL. The Program can be described explicitly if $r \ge n - 2$; some further steps were done recently in the case $r \ge n - 3$. A series of classical results can then be proved in a simpler and more general form.