Abstract

The main aim of this Thesis is to let the reader know about the connection between the theory of complex projective algebraic varieties and Kähler manifolds. A result by Ködaira (which uses Hodge Decomposition) is that Kähler manifolds whose Kähler form are of integral cohomology class (called Polarised manifolds) are projective and the analytification of every smooth complex projective variety is a polarised manifold. There is also an introductory background in Spectral Sequences present in the thesis that is used to generalize Hodge Decomposition as degeneration of Frölicher Spectral Sequence at E_1 ; (i.e. page 1 of the spectral sequence).