Special manifolds and classification theory

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Abstract

We introduce a new class of "special" (compact Kaehler) manifolds, generalising in higher dimensions the class of "special" curves (rational and elliptic). We show that rationally connected manifolds and manifolds with Kodaira dimension zero are "special". Further, any compact Kaehler Manifold has a canonical fibration with maximal "special" fibres.We conjecture that the base of this fibration is of general type (in a suitable, enlarged sense) if not a point. We make some further conjectures (partially checked up to dimension 3) concerning hyperbolicity properties and fundamental group of this fibration which extend conjectures of Iitaka,Lang and Kobayashi. One gets so a conjectural very simple picture of Classification Theory,and a series of new questions and special cases in which they can be tested.