

The geometry of holomorphic and algebraic curves in
complex algebraic varieties

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On the uniformity of the Iitaka fibration

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Abstract

We study pluricanonical systems on smooth projective varieties of positive Kodaira dimension, motivated by the results obtained by Hacon-McKernan, Takayama and Tsuji in the case of varieties of general type. In particular, we are interested in the uniformity of the Iitaka fibration $\phi_{m, K_X} : X \dashrightarrow \text{Iitaka}(X)$ of smooth projective varieties of arbitrary (positive) Kodaira dimension such that $\text{Iitaka}(X)$ is not uniruled, and the variation of the fibration is maximal.