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Bing-Long Chen and **Xiao-Yong Fu*** (mcsfxy@mail.sysu.edu.cn), Guangzhou, Guangdong 510275, Peoples Rep of China, and **Le Yin** and **Xi-Ping Zhu**. *Yau's Conjecture on holomorphic functions of polynomial growth.*

In order to generalize the classical uniformization theorem to higher dimensions , Yau proposed to study the space of holomorphic functions of polynomial growth on complete noncompact Kahler manifold with nonnegative holomorphic bisectional curvature. In particular, it was asked if the dimension of the space of holomorphic functions of polynomial growth is bounded from above by the dimension of the corresponding space of polynomials on complex Euclidean space, with equality if and only if the manifold is holomorphically isometric to complex Euclidean space. In a joint work with Prof. Xi-Ping Zhu, Bing-Long Chen and Le Yin, we answer the above question affirmatively and give sharp dimension estimates when the manifold is not of maximal volume growth or has positive Ricci curvature somewhere. Our work is inspired by that of Lei Ni. (Received January 28, 2009)