

Abstract

In this talk, we will give the definition of geodesic-Einstein metric, which is a natural generalization of Hermitian-Einstein metric. For the case of projective bundle fibration, the existence of geodesic-Einstein metric is equivalent to the existence of Hermitian-Einstein metric, which solves a problem of S. Kobayashi. And we can also define the Donaldson type functional, its critical point is exactly the geodesic-Einstein metric, the relation between the lower bound of this functional and the existence is also discussed.