

1135-53-3075

**Joseph Ansel Hoisington\*** (jhois@math.upenn.edu). *Total Curvature and the Betti Numbers of a Complex Projective Manifold.*

We will show that the sum of the Betti numbers of a complex projective manifold can be estimated in terms of its total curvature, as measured by the second fundamental form of its immersion into projective space, and characterize the manifolds whose total curvature is minimal. These results extend the classic theorems of Chern and Lashof to a new setting. (Received September 26, 2017)