

CURVATURE PINCHING FOR COMPLETE TOTALLY REAL SUBMANIFOLDS OF A COMPLEX PROJECTIVE SPACE

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Montiel, Ros and Urbano 1986 showed a complete characterization of compact totally real minimal submanifold M of $CP^n(c)$ with Ricci curvature S of M satisfying $S \geq \frac{3(n-2)}{16}c$. The purpose of this paper is to give the other proof for answerings 2000 and 2002 by the author of Ogiue's conjecture which the above result remains true under the weaker condition of the scalar curvature ρ of M satisfying $\rho \geq \frac{3n(n-2)}{16}c$ and to consider the case of M being complete.