

Mayuko Kon (Hokkaido University, Hokkaido, Japan)

Compact minimal CR submanifolds of a complex projective space with positive Ricci curvature

Abstract: We give a reduction theorem of the codimension of a compact n -dimensional minimal proper CR submanifold M of a complex projective space. We prove that if the Ricci curvature of M is equal or greater than n minus 1, then M is a real hypersurface of some totally geodesic complex projective space. Using this result, we classify compact minimal CR submanifolds of a complex projective space of which the Ricci tensor satisfies certain conditions.