

Year: 2013

Vol.: 82

Fasc.: 3-4

Title: On the Ricci tensor and the generalized Tanaka–Webster connection of real hypersurfaces in a complex space form

Author(s): Mayuko Kon

We prove that the Ricci tensor $\hat{S}$ with respect to the generalized Tanaka–Webster connection of a real hypersurface with the almost contact structure (η, ϕ, ξ, g) in a complex space form of complex dimension $n \geq 3$ satisfies $\hat{S}(X, \phi Y) = \lambda g(X, \phi Y)$ for any vector field X and Y , λ being a function, if and only if the real hypersurface is locally congruent to some type (A) hypersurface.

Address:

Mayuko Kon
Faculty of Education
Shinshu University
6-Ro, Nishinagano
Nagano City 380-8544
Japan