

ON INVARIANT SUBMANIFOLDS IN GENERALIZED SASAKIAN SPACE FORMS

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ABSTRACT. In this article, we establish some inequalities for invariant submanifolds involving totally real sectional curvature and the scalar curvature. The equality cases are also discussed.

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1. INTRODUCTION

Perhaps one of the most significant aspects of submanifold theory is that which deals with the relations between the main extrinsic invariants and the main intrinsic invariants of a submanifold. B.Y. Chen [5] introduced a series of invariants on a Kaehler manifold and proved several general inequalities involving these invariants for Kaehler submanifolds in complex space forms. In [11] the authors established similar inequalities for invariant submanifolds in locally conformal almost cosymplectic manifolds. In [1] the authors introduced the notion of a generalized Sasakian