



# CAUCHY-RIEMANNIAN SUBMANIFOLD OF MAXIMAL DIMENSION IN STATISTICAL SASAKIAN SPACE FORM

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In this paper, we study statistical Cauchy-Riemannian maximal submanifolds in the statistical Sasakian space form which naturally inherit their Sasakian structure from the ambient. We show that there exists a Cauchy-Riemann maximal submanifold in statistical Sasakian space form where the  $\psi$ -holomorphic sectional curvature of the ambient space is bounded. Moreover, a Cauchy-Riemannian maximal submanifold in the statistical Sasakian space form has at most four principal curvatures under some properties of second fundamental form  $C$  and its dual.

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