

# TWISTED SASAKIAN METRIC ON THE TANGENT BUNDLE AND HARMONICITY

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**Abstract.** In the present paper, we introduce a new class of natural metrics on the tangent bundle  $TM$  of the Riemannian manifold  $(M, g)$  denoted by  $G^{f,h}$  which is named a twisted Sasakian metric. A necessary and sufficient conditions under which a vector field is harmonic with respect to the twisted Sasakian metric are established. Some examples of harmonic vector fields are presented as well.

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