

WARPED PRODUCT SEMI-SLANT SUBMANIFOLDS OF A NEARLY COSYMPLECTIC MANIFOLD

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In this paper, we study warped product semi-slant submanifolds of a nearly cosymplectic manifold. We show that the warped product submanifold of the type $N_T \times_f N_\theta$ does not exist in a nearly cosymplectic manifold \bar{M} , whereas we obtain some characterization results for the warped product of the type $N_\theta \times_f N_T$, where N_T and N_θ are invariant and proper slant submanifolds of \bar{M} , respectively. Moreover, we obtain a general sharp inequality in terms of the warping function for squared norm of the second fundamental form.