

**CERTAIN CURVES ON SOME CLASSES OF THREE-DIMENSIONAL
TRANS-SASAKIAN MANIFOLDS ADMITTING SCHOUTEN-VAN
KAMPEN CONNECTION**

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ABSTRACT. In the present paper we study biharmonic Legendre curves and locally ϕ -symmetric Legendre curves with respect to Schouten-van Kampen connection on three-dimensional trans-Sasakian manifolds. Also we study mean curvature vector of Legendre curves and C -parallel slant curves in a three-dimensional trans-Sasakian manifold with respect to Schouten-van Kampen connection. Finally, we construct an example of a geodesic Legendre curve on a three-dimensional trans-sasakian manifold with respect to Schouten-van Kampen connection.

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