On Three-Dimensional Trans-Sasakian Manifolds

U. C. De, Avijit Sarkar

Department of Mathematics, University of Kalyani, Kalyani 741235,
West Bengal, India, e-mail: uc_de@yahoo.com

Department of Mathematics, University of Burdwan, Burdwan 713104,
West Bengal, India, e-mail: avjaj@yahoo.co.in

Abstract: The object of the present paper is to study 3-dimensional trans-Sasakian manifolds
which are locally $\phi$-symmetric and have $\eta$-parallel Ricci tensor. Also 3-dimensional trans-
Sasakian manifolds of constant curvature have been considered. An example of a three-
dimensional locally $\phi$-symmetric trans-Sasakian manifold is given.

Key words: trans-Sasakian manifold, scalar curvature, locally $\phi$-symmetric, $\eta$-parallel Ricci
tensor, constant curvature.

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