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**Title:** A note on trans-Sasakian manifolds

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In this paper, we obtain a necessary and sufficient condition for a 3-dimensional compact connected positively curved trans-Sasakian manifold of type  $(\alpha, \beta)$ , to be homothetic to a Sasakian manifold. The necessary and sufficient condition is that the smooth function  $\alpha \neq 0$  and satisfies the differential equation  $H_\alpha(\xi, \xi) = 0$ . Similarly, using the smooth function  $\beta$ , necessary and sufficient conditions are found for a trans-Sasakian manifold to be homothetic to a Sasakian manifold.

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