The following is the abstract of the present paper which describes the article most efficiently:

“We prove that any one-relator group \( G \) is the fundamental group of a compact Sasakian manifold if and only if \( G \) is either finite cyclic or isomorphic to the fundamental group of a compact Riemann surface of genus \( g > 0 \) with at most one orbifold point of order \( n \geq 1 \). We also classify all groups of deficiency at least 2 that are also the fundamental group of some compact Sasakian manifold.”

Reviewer: Joonhyung Kim (Jeonju)

MSC:

- 57M50 General geometric structures on low-dimensional manifolds
- 32Q15 Kähler manifolds
- 57M05 Fundamental group, presentations, free differential calculus
- 14F35 Homotopy theory and fundamental groups in algebraic geometry
- 32J15 Compact complex surfaces

Keywords:

Sasakian manifold; deficiency of groups; virtual surface group; one-relator group

Full Text: DOI

References:

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