Meeting: 1003, Atlanta, Georgia, AMS CP 1, AMS Contributed Paper Session

1003-57-305 Ryo Ohashi* (ohashir@slu.edu), Saint Louis University, Department of Mathematics, 221
N.Grand Blvd, St.Louis, MO 63103. The Classification of Isometry Groups of the Prism
Manifolds. Preliminary report.

Let W be a twisted I-bundle over a Klein bottle fibered trivially and V be a type(p,q) exceptionally fibered solid torus. Since ∂V and ∂W is a torus, we may form a quotient space N by identifying the boundaries via a fiber preserving homeomorphism. Then, N is a *Seifert fiber space* with one exceptional fiber of type(p,q). Such the quotient space is known as a prism manifold. Moreover, N is double covered by a symmetric lens space L, which gives a geometric structure on N.

Let $Isom_l(N)$ be the subgroup of Isom(N) consisting of isometries which are liftable to L. We will completely classify $Isom_l(N)$ and Isom(N).

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