

Enumerating 3-manifolds with the first homology groups isomorphic to $(\mathbb{Z}/n\mathbb{Z})+(\mathbb{Z}/n\mathbb{Z})$ with lengths up to 10

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Abstract. This is a joint work with A. Kawauchi. A well-order was introduced on the set of links by A. Kawauchi. This well-order also naturally induces a well-order on the set of prime link exteriors and eventually induces a well-order on the set of closed connected orientable 3-manifolds. With respect to this order, we enumerated the prime links and the prime link exteriors with lengths up to 10. In this talk, we show a list of the enumeration of 3-manifolds with the first homology groups isomorphic to $(\mathbb{Z}/n\mathbb{Z})+(\mathbb{Z}/n\mathbb{Z})$ with lengths up to 10 by using the enumeration of the prime link exteriors.