Enumerating the exteriors of prime links by a canonical order

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This is a joint work with Akio Kawauchi. He gave a well-order to the set of links, which induces the well-orders into the set of link exteriors and the set of 3-manifolds. The length of a link is the minimum string number when we deform the link into a closed braid. The length of a link exterior and that of a 3-manifold is defined by using the length of a link. We enumerated the prime links with up to length 10. Our goal of this study is to enumerate 3-manifolds with up to length 10. In this talk, we enumerate the exteriors of prime links with up to length 9, which is in a step of the goal.