

A Seifert fibered manifold with infinitely many knot-surgery descriptions

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Osoinach introduced a way to construct a 3-manifold which can be obtained by the same integral Dehn surgery on an infinite number of knots in the 3-sphere. Using it, he gave such a hyperbolic 3-manifold and a toroidal 3-manifold. In this talk, I give the first example of a Seifert fibered manifold that can be obtained by the same integral surgery on an infinite number of hyperbolic knots. Interestingly, most of those knots have no symmetry. This implies that those knots cannot lie on a genus two Heegaard surface of the 3-sphere. Osoinach introduced a way to construct a 3-manifold which can be obtained by the same integral Dehn surgery on an infinite number of knots in the 3-sphere. Using it, he gave such a hyperbolic 3-manifold and a toroidal 3-manifold. In this talk, I give the first example of a Seifert fibered manifold that can be obtained by the same integral surgery on an infinite number of hyperbolic knots. Interestingly, most of those knots have no symmetry. This implies that those knots cannot lie on a genus two Heegaard surface of the 3-sphere.

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