

Infinitely many ribbon disks with the same exterior

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Abstract. In 1962, Gluck proved that there are, at most, two different 2-knots with the same exterior. In 1976, Gordon proved that there exist two different 2-knots with the same exterior.

In this talk, we consider an analogues problem for ribbon disks in the 4-ball D^4 . We observe that there exist infinitely many ribbon disks with the same exterior. This result follows from the previous joint work with M.Tange. We also study whether the exterior is a handlebody bundle over S^1 .