

## **Birman–Hilden property and Non-orientable surfaces**

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A (branched) covering between surfaces is said to have or satisfy the Birman–Hilden property, if the finite index subgroup of the mapping class group of the base surface, injectively maps to the mapping class group of the covering surface modulo a finite subgroup. This property is studied for regular, irregular, branched and unbranched coverings of orientable surfaces by some mathematicians before.

In this talk, we will give one sufficient condition for coverings between non-orientable surfaces to satisfy Birman–Hilden property.