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Braid Groups and the Word Problem

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Abstract

In this poster, we define the braid groups B_n and the pure braid groups P_n of the plane. We will show the classical presentation of both in terms of the Artin generators.

Also, we will show that in both groups the word problem has solution. We will give a geometric algorithm that decides when two given braids are equal, namely "braid combing".

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References

[1] KUNIO MURASUGI E BOHDAN I. KURPITA, A Study of Braids. Mathematics and Its Applications, **484**. Netherlands: Kluwer Academic Publishers, 1999.

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