

**Dehornoy, Patrick**

**Groups with a complemented presentation.** (English) Zbl 0870.20023  
*J. Pure Appl. Algebra* 116, No. 1-3, 115-137 (1997).

A presentation of a group is said to be right complemented if for any two generators  $x$  and  $y$ , there exists one relation of the form  $xu = yv$ , where  $u$  and  $v$  are finite products of generators, and furthermore any relation in the presentation is such a relation. Artin's braid groups are an important example. The author investigates such groups and presents a simple quadratic algorithm for solving their word problem.

Reviewer: S.C.Althoen (Flint)

**MSC:**

**20F05** Generators, relations, and presentations of groups

**20F10** Word problems, other decision problems, connections with logic and automata (group-theoretic aspects)

**20F36** Braid groups; Artin groups

Cited in **1** Review  
Cited in **27** Documents

**Keywords:**

right complemented presentations; generators; relations; Artin's braid groups; quadratic algorithms; word problems

**Full Text:** [DOI](#)

**References:**

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