Braids on Surfaces Digest

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Braids on surfaces and finite type invariants

Tresses sur les surfaces et invariants de type fini

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Abstract

We prove that there is no functorial universal finite type invariant for braids in $\Sigma \times I$ if the genus of Σ is positive. *To cite this article: P.Bellingeri, L.Funar, C. R. Acad. Sci. Paris, Ser. I 336 (2003).*

ON PRESENTATIONS OF SURFACE BRAID GROUPS

PAOLO BELLINGERI

ABSTRACT. We give presentations of braid groups and pure braid groups on surfaces and we show some properties of surface pure braid groups.

Vassiliev invariants for braids on surfaces

Juan González-Meneses   Luis Paris

May, 2000

Abstract

We show that Vassiliev invariants separate braids on a closed oriented surface, and we exhibit an universal Vassiliev invariant for these braids in terms of chord diagrams labeled by elements of the fundamental group of the considered surface. ||

New presentations of surface braid groups

Juan González-Meneses

October, 1999

Abstract

In this paper we give new presentations of the braid groups and the pure braid groups of a closed surface. We also give an algorithm to solve the word problem in these groups, using the given presentations. ||

Surface framed braids

Paolo Bellingeri and Sylvain Gervais

Abstract

In this paper we introduce the framed pure braid group on n strands of an oriented surface, a topological generalisation of the pure braid group P_n. We give different equivalents definitions for framed pure braid groups and we study exact sequences relating these groups with other generalisations of P_n, usually called surface pure braid groups. The notion of surface framed braid groups is also introduced.