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Abstracts of Short Communications and Posters

Section:

6. Topology

1991 MS Classification: 18, 20, 55, 57
Vershinin, Vladimir, Sobolev Institute of Mathematics, Novosibirsk, Russia
Generalizations of Braids: Homology and Vassiliev Invariants
We consider the following generalizations of braids: braid group in a handlebody of the genus g and singular braids: the braid-permutation group BP_n and the Baez-Birman monoid SB_n, (or singular braid monoid). The braid-permutation group BP_n is the subgroup of the group of automorphisms of a free group $AutF_n$, generated by the symmetric group Σ_n and the braid group, considered as subgroups of $AutF_n$. Their homological properties are studied. Applications to the theory of Vassiliev invariants are obtained.
Reference: V. V. Vershinin, Generalizations of braids from homological point of view, in Proceedings of the 10th Siberian Summer School on Algebra and Analysis. Inst. of Math., Novosibirsk, (1997), 40-62 (Russian).