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Title:	On some decompositions of the 3-strand singular braid group
Authors:	Gongopadhyay, Krishnendu (/jspui/browse?type=author&value=Gongopadhyay%2C+Krishnendu)
Keywords:	Braid group Monoid of singular braids Singular pure braid group
Issue Date:	2020
Publisher:	Elsevier B.V.
Citation:	Topology and its Applications, 283.
Abstract:	Let SB_n be the singular braid group generated by braid generators σ_i and singular braid generators τ_i, $1 \leq i \leq n-1$. Let ST_n denote the group that is the kernel of the homomorphism that maps, for each i, σ_i to the cyclic permutation $(i, i+1)$ and τ_i to 1. In this paper we investigate the group ST_3. We obtain a presentation for ST_3. We prove that ST_3 is isomorphic to the singular pure braid group SP_3 on 3 strands. We also prove that the group ST_3 is semi-direct product of a subgroup H and an infinite cyclic group, where the subgroup H is an HNN-extension of $Z_2 * Z_2$.
URI:	https://www.sciencedirect.com/science/article/pii/S0166864120303400?via%3Dihub (https://www.sciencedirect.com/science/article/pii/S0166864120303400?via%3Dihub) http://hdl.handle.net/123456789/3167 (http://hdl.handle.net/123456789/3167)
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