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Title:	Automorphisms of pure braid groups
Authors:	Singh, Mahender (/jspui/browse?type=author&value=Singh%2C+Mahender)
Keywords:	Braid group Central automorphism Extended mapping class group Pure braid group
Issue Date:	2018
Publisher:	Springer-Verlag Wien
Citation:	Monatshefte fur Mathematik, 187(1), pp. 1-19
Abstract:	In this paper, we investigate the structure of the automorphism groups of pure braid groups. We prove that, for $n>3$, $\mathrm{Aut}(Pn)$ is generated by the subgroup $\mathrm{Aut}c(Pn)$ of central automorphisms of Pn, the subgroup $\mathrm{Aut}(Bn)$ of restrictions of automorphisms of Bn on Pn and one extra automorphism wn. We also investigate the lifting and extension problem for automorphisms of some well-known exact sequences arising from braid groups, and prove that that answers are negative in most cases. Specifically, we prove that no non-trivial central automorphism of Pn can be extended to an automorphism of Bn.
Description:	Only IISERM authors are available in the record.
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