



Library Indian Institute of Science Education and Research Mohali



DSpace@IISERMohali (/jspui/)
/ Publications of IISER Mohali (/jspui/handle/123456789/4)
/ Research Articles (/jspui/handle/123456789/9)

Please use this identifier to cite or link to this item: <http://hdl.handle.net/123456789/4335>

| | |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Title: | Automorphisms of odd Coxeter groups |
| Authors: | Naik, Tushar Kanta (/jspui/browse?type=author&value=Naik%2C+Tushar+Kanta) Singh, Mahender (/jspui/browse?type=author&value=Singh%2C+Mahender) |
| Keywords: | Coxeter Automorphisms |
| Issue Date: | 2021 |
| Publisher: | Springer link |
| Citation: | Monatshefte Für Mathematik, 195(3), 501–521. |
| Abstract: | An odd Coxeter group W is one which admits a Coxeter system (W, S) for which all the exponents m_{ij} are either odd or infinity. The paper investigates the family of odd Coxeter groups whose associated labeled graphs $V(W, S)$ are trees. It is known that two Coxeter groups in this family are isomorphic if and only if they admit Coxeter systems having the same rank and the same multiset of finite exponents. In particular, each group in this family is isomorphic to a group that admits a Coxeter system whose associated labeled graph is a star shaped tree. We give the complete description of the automorphism group of this group, and derive a sufficient condition for the splitting of the automorphism group as a semi-direct product of the inner and the outer automorphism groups. As applications, we prove that Coxeter groups in this family satisfy the R^∞ -property and are (co)-Hopfian. We compare structural properties, automorphism groups, R^∞ -property and (co)-Hopfianity of a special odd Coxeter group whose only finite exponent is three with the braid group and the twin group. |
| Description: | Only IISER Mohali authors are available in the record. |
| URI: | https://doi.org/10.1007/s00605-020-01496-3 (https://doi.org/10.1007/s00605-020-01496-3) http://hdl.handle.net/123456789/4335 (http://hdl.handle.net/123456789/4335) |
| Appears in Collections: | Research Articles (/jspui/handle/123456789/9) |

Files in This Item:

| File | Description | Size | Format | |
|-----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|----------|-----------|-------------------------------------------------------------------------------------------------------------|
| Need To Add...Full Text_ PDF.pdf (/jspui/bitstream/123456789/4335/1/Need%20To%20Add%e2%80%a6Full%20Text_ PDF..pdf) | Only IISER Mohali authors are available in the record. | 15.36 kB | Adobe PDF | View/Open (/jspui/bitstream/123456789/4335/1/Need%20To%20Add%e2%80%a6Full%20Text_ PDF..pdf) |

[Show full item record \(/jspui/handle/123456789/4335?mode=full\)](#)

[Statistics \(/jspui/handle/123456789/4335/statistics\)](#)

Items in DSpace are protected by copyright, with all rights reserved, unless otherwise indicated.