

## LIST OF PUBLICATIONS

GÖTZ PFEIFFER

### Book.

1. (with Meinolf Geck)  
*Characters of Finite Coxeter Groups and Iwahori–Hecke Algebras.*  
London Mathematical Society Monographs, New Series **21**. Oxford University Press,  
2000. xvi+446 pp. ISBN: 0-19-850250-8.  
MR [1778802](#) (2002k:20017). Zbl [0996.20004](#).

### Articles.

2. (with Brendan Masterson)  
On the Table of Marks of a Direct Product of Finite Groups.  
28 pages, to appear in *J. Algebra*. doi:[10.1016/j.jalgebra.2017.12.019](#). arXiv:[1704.03433](#).
3. (with Alice C. Niemeyer and Cheryl E. Praeger)  
On the Complexity of Multiplication in the Iwahori–Hecke Algebra of the Symmetric Group.  
*J. Symb. Comp.* **80** (2017), part 3, 817–832. doi:[10.1016/j.jsc.2016.09.001](#). MR [3574535](#). arXiv:[1512.05319](#).
4. (with Ivan Marin)  
The BMR Freeness Conjecture for the 2-Reflection Groups.  
*Math. Comp.* **86** (2017), no. 306, 2005–2023. doi:[10.1090/mcom/3142](#). MR [3626546](#).  
Zbl [06697254](#). arXiv:[1411.4760](#).
5. (with Marcus Bishop, J. Matthew Douglass and Gerhard Röhrle)  
Computations for Coxeter arrangements and Solomon’s descent algebra III: Groups of rank seven and eight.  
*J. Algebra* **423** (2015), 1213–1232. doi:[10.1016/j.jalgebra.2014.10.025](#). MR [3283755](#).  
Zbl [1306.20004](#). arXiv:[1403.6227](#).
6. (with J. Matthew Douglass and Gerhard Röhrle)  
Cohomology of Coxeter Arrangements and Solomon’s Descent Algebra.  
*Trans. Amer. Math. Soc.* **366** (2014), no. 10, 5379–5407. doi:[10.1090/S0002-9947-2014-06060-1](#). MR [3240927](#). Zbl [1343.20005](#). OWP [2011-03](#). arXiv:[1101.2075](#).
7. (with J. Matthew Douglass and Gerhard Röhrle)  
On Reflection Subgroups of Finite Coxeter Groups.  
*Comm. Algebra* **41** (2013), no. 7, 2574–2592. doi:[10.1080/00927872.2012.661005](#). MR [3169410](#). Zbl [1282.20040](#). OWP [2011-06](#). arXiv:[1101.5893](#).

8. (with Liam Naughton)  
Integer Sequences Realized by the Subgroup Pattern of the Symmetric Group.  
*J. Integer Seq.* **16** (2013), no. 5, Article [13.5.8](#), 23 pages. MR [3065337](#). Zbl [1288.20002](#).  
arXiv:[1211.1911](#).
9. (with Marcus Bishop)  
On the Quiver Presentation of the Descent Algebra of the Symmetric Group.  
*J. Algebra* **383** (2013), 212–231. doi:[10.1016/j.jalgebra.2013.02.027](#). MR [3037976](#). Zbl  
[1291.20003](#). arXiv:[1206.0327](#).
10. (with Marcus Bishop, J. Matthew Douglass and Gerhard Röhrle)  
Computations for Coxeter arrangements and Solomon’s descent algebra II: Groups of  
rank five and six.  
*J. Algebra* **377** (2013), 320–332. doi:[10.1016/j.jalgebra.2012.11.047](#). MR [3008911](#). Zbl  
[1277.20007](#). arXiv:[1201.4775](#).
11. (with Marcus Bishop, J. Matthew Douglass and Gerhard Röhrle)  
Computations for Coxeter arrangements and Solomon’s descent algebra: Groups of rank  
three and four.  
*J. Symbolic Comput.* **50** (2013), 139–158. doi:[10.1016/j.jsc.2012.06.001](#). MR [2996872](#).  
Zbl [1257.20004](#). arXiv:[1110.0120](#).
12. (with Liam Naughton)  
Computing the Table of Marks of a Cyclic Extension.  
*Math. Comp.* **81** (2012), no. 280, 2419–2438. doi:[10.1090/S0025-5718-2012-02600-7](#).  
MR [2945164](#). Zbl [1282.20015](#). arXiv:[1105.4064](#).
13. (with J. Matthew Douglass and Gerhard Röhrle)  
An Inductive Approach to Coxeter Arrangements and Solomon’s Descent Algebra.  
*J. Algebraic Combin.* **35** (2012), no. 2, 215–235. doi:[10.1007/s10801-011-0301-9](#). MR  
[2886288](#) (2012m:05431). Zbl [1248.20006](#). OWP [2011-16](#). arXiv:[1104.0551](#).
14. (with Matjaž Konvalinka and Claas Röver)  
A Note on Element Centralizers in Finite Coxeter Groups.  
*J. Group Theory* **14** (2011), no. 5, 727–745. doi:[10.1515/JGT.2010.074](#). MR [2831968](#)  
(2012j:20125). Zbl [1245.20045](#). arXiv:[1005.1186](#).
15. A Quiver Presentation for Solomon’s Descent Algebra.  
*Adv. Math.* **220** (2009), no. 5, 1428–1465. doi:[10.1016/j.aim.2008.11.005](#). MR [2493617](#)  
(2010b:16028). Zbl [1203.20004](#). arXiv:[0709.3914](#).
16. (with C. Bonnafé)  
Around Solomon’s Descent Algebras.  
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17. (with Robert Boltje)  
An algorithm for the unit group of the Burnside ring of a finite group.  
In: C. M. Campbell, M. R. Quick, E. F. Robertson and G. C. Smith (eds.), *Groups  
St Andrews 2005 Volume 1*, LMS Lecture Note Series 339, Cambridge University Press

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18. (with Gerhard Röhrle)  
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19. Counting Transitive Relations.  
*J. Integer Seq.* **7** (2004), no. 3, Article [04.3.2](#), 11 pages. MR [2085342](#) (2005b:06008). Zbl [1071.06003](#).
20. (with Gerhard Röhrle)  
Distributive coset graphs of finite Coxeter groups.  
*J. Group Theory* **6** (2003), no. 3, 311–320. doi:[10.1515/jgth.2003.021](https://doi.org/10.1515/jgth.2003.021). MR [1983369](#) (2004d:20043). Zbl [1062.20045](#).
21. (with M. D. Atkinson and S. v. Willigenburg)  
The  $p$ -modular descent algebras.  
*Algebr. Represent. Theory* **5** (2002), no. 1, 101–113. doi:[10.1023/A:1014413413572](https://doi.org/10.1023/A:1014413413572). MR [1890595](#) (2003f:20058). Zbl [1087.20031](#). arXiv:[0706.2908](#).
22. (with S. A. Linton, E. F. Robertson, and N. Ruškuc)  
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23. (with Meinolf Geck and Sungsoon Kim)  
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*J. Algebra* **229** (2000), no. 2, 570–600. doi:[10.1006/jabr.1999.8253](https://doi.org/10.1006/jabr.1999.8253). MR [1769289](#) (2001h:20049). Zbl [1042.20026](#).
24. (with Thomas Breuer)  
Finding Possible Permutation Characters.  
*J. Symbolic Comput.* **26** (1998), no. 3, 343–354. doi:[10.1006/jsco.1998.0217](https://doi.org/10.1006/jsco.1998.0217). MR [1633876](#) (99e:20005). Zbl [0921.20013](#).
25. (with S. A. Linton, E. F. Robertson, and N. Ruškuc)  
Groups and Actions in Transformation Semigroups.  
*Math. Z.* **228** (1998), no. 3, 435–450. doi:[10.1007/PL00004628](https://doi.org/10.1007/PL00004628). MR [1637855](#) (99e:20078). Zbl [0902.20028](#).
26. The Subgroups of  $M_{24}$  or How to Compute the Table of Marks of a Finite Group.  
*Experiment. Math.* **6** (1997), no. 3, [247–270](#). MR [1481593](#) (98h:20032). Zbl [0895.20017](#).
27. Character Values of Iwahori–Hecke Algebras of Type  $B$ .  
In: Marc Cabanes (Ed.) *Finite Reductive Groups, Related Structures and Representations (Luminy, 1994)*, Progr. Math. **141**, Birkhäuser, Boston 1997, pp. 333–360. MR [1429879](#) (98a:20008). Zbl [0876.20011](#).

28. (with Meinolf Geck, Gerhard Hiß, Frank Lübeck, and Gunter Malle)  
 CHEVIE - A System for Computing and Processing Generic Character Tables.  
*Appl. Algebra Engrg. Comm. Comput.* **7** (1996), no. 3, 175–210.  
 doi:[10.1007/s002000050027](https://doi.org/10.1007/s002000050027). MR [1486215](https://www.ams.org/mathscinet/item?id=99m:20017) (99m:20017). Zbl [0847.20006](https://zbmath.org/?q=ser/0847.20006).
29. Young characters on Coxeter basis elements of Iwahori–Hecke algebras and a Murnaghan–Nakayama formula.  
*J. Algebra* **168** (1994), no. 2, 525–535. doi:[10.1006/jabr.1994.1243](https://doi.org/10.1006/jabr.1994.1243). MR [1292779](https://www.ams.org/mathscinet/item?id=95g:20012) (95g:20012). Zbl [0834.20013](https://zbmath.org/?q=ser/0834.20013).
30. Character tables of Weyl groups in GAP.  
*Bayreuth. Math. Schr.* **47** (1994), 165–222. MR [1285208](https://www.ams.org/mathscinet/item?id=95d:20027) (95d:20027). Zbl [0830.20023](https://zbmath.org/?q=ser/0830.20023).
31. (with Meinolf Geck)  
 On the irreducible characters of Hecke algebras.  
*Adv. Math.* **102** (1993), no. 1, 79–94. doi:[10.1006/aima.1993.1056](https://doi.org/10.1006/aima.1993.1056). MR [1250466](https://www.ams.org/mathscinet/item?id=94m:20018) (94m:20018). Zbl [0816.20034](https://zbmath.org/?q=ser/0816.20034).
32. (with Meinolf Geck)  
 Unipotent characters of the Chevalley groups  $D_4(q)$ ,  $q$  odd.  
*Manuscripta Math.* **76** (1992), no. 3-4, 281–304. doi:[10.1007/BF02567762](https://doi.org/10.1007/BF02567762). MR [1185021](https://www.ams.org/mathscinet/item?id=93j:20035) (93j:20035). Zbl [0813.20016](https://zbmath.org/?q=ser/0813.20016).

### Theses.

33. *Charakterwerte von Iwahori–Hecke-Algebren von klassischem Typ.*  
 Dissertation, RWTH Aachen 1994.  
 Aachener Beiträge zur Mathematik **14**, Verlag der Augustinus Buchhandlung, Aachen 1995, 64 pages. ISBN: 3-86073-423-7.  
 Zbl [0834.20014](https://zbmath.org/?q=ser/0834.20014).
34. *Von Permutationscharakteren und Markentafeln.*  
 Diplomarbeit, RWTH Aachen 1991.  
 (<http://schmidt.nuigalway.ie/~goetz/pub/dpl.html>)

### Preprints.

35. (with Hery Randriamaro)  
 The Varchenko Determinant of a Coxeter Arrangement.  
 12 pages. OWP [2017-33](https://arxiv.org/abs/2017.33). arXiv:[1711.01146](https://arxiv.org/abs/1711.01146).
36. (with John M. Burns)  
 Maximal order Abelian subgroups of Coxeter groups as discrete maximal tori.  
 31 pages. arXiv:[1601.07812](https://arxiv.org/abs/1601.07812).
37. Quiver Presentations for Descent Algebras of Exceptional Type.  
 25 pages.  
 arXiv:[0810.2743](https://arxiv.org/abs/0810.2743).