

---

## BIBLIOGRAPHY

- [1] Alejandro Adem, *Lectures on the cohomology of finite groups*, Interactions between Homotopy Theory and Algebra, Contemp. Math., vol. 436, Amer. Math. Soc., Providence, RI, 2007, pp. 317–334. MR 2355780
- [2] Alejandro Adem and R. James Milgram, *Cohomology of finite groups*, second ed., Grundlehren Der Mathematischen Wissenschaften [Fundamental Principles of Mathematical Sciences], vol. 309, Springer-Verlag, Berlin, 2004. MR 2035696
- [3] F. Altunbulak Aksu and D. J. Green, *Essential cohomology for elementary abelian  $p$ -groups*, Journal of Pure and Applied Algebra **213** (2009), no. 12, 2238–2243. MR 2553600
- [4] Glen E. Bredon, *Introduction to compact transformation groups*, Pure and Applied Mathematics, Vol. 46, Academic Press, New York-London, 1972. MR 413144
- [5] Kenneth S. Brown, *Cohomology of groups*, Graduate Texts in Mathematics, vol. 87, Springer-Verlag, New York-Berlin, 1982. MR 672956
- [6] Sylvain E. Cappell and Julius L. Shaneson, *Pseudofree actions. I*, Algebraic Topology, Aarhus 1978 (Proc. Sympos., Univ. Aarhus, Aarhus, 1978), Lecture Notes in Math., vol. 763, Springer, Berlin, 1979, pp. 395–447. MR 561231
- [7] Henri Cartan and Samuel Eilenberg, *Homological algebra*, Princeton University Press, Princeton, NJ, 1956. MR 77480
- [8] James F. Davis and Paul Kirk, *Lecture notes in algebraic topology*, Graduate Studies in Mathematics, vol. 35, American Mathematical Society, Providence, RI, 2001. MR 1841974
- [9] Allan L. Edmonds, *Aspects of group actions on four-manifolds*, Topology and its Applications **31** (1989), no. 2, 109–124. MR 994404
- [10] ———, *Homologically trivial group actions on 4-manifolds*, arxiv:math/9809055 (1998).

- [11] ———, *Pseudofree group actions on spheres*, Proceedings of the American Mathematical Society **138** (2010), no. 6, 2203–2208. MR 2596060
- [12] Allan L. Edmonds and John H. Ewing, *Realizing forms and fixed point data in dimension four*, American Journal of Mathematics **114** (1992), no. 5, 1103–1126. MR 1183533
- [13] Samuel Eilenberg, *Homology of spaces with operators. I*, Transactions of the American Mathematical Society **61** (1947), 378–417; errata, 62, 548 (1947). MR 21313
- [14] Ronald Fintushel, *Circle actions on simply connected 4-manifolds*, Transactions of the American Mathematical Society **230** (1977), 147–171. MR 458456
- [15] Ian Hambleton, *A remark about dihedral group actions on spheres*, Bulletin of the London Mathematical Society **43** (2011), no. 1, 75–78. MR 2765551
- [16] ———, *Topological spherical space forms*, Handbook of Group Actions. Vol. II, Adv. Lect. Math. (ALM), vol. 32, Int. Press, Somerville, MA, 2015, pp. 151–172. MR 3382027
- [17] Ian Hambleton and Ronnie Lee, *Finite group actions on  $P^2(\mathbb{C})$* , Journal of Algebra **116** (1988), no. 1, 227–242. MR 944157
- [18] ———, *Smooth group actions on definite 4-manifolds and moduli spaces*, Duke Mathematical Journal **78** (1995), no. 3, 715–732. MR 1334207
- [19] Ian Hambleton and Semra Pamuk, *Rank conditions for finite group actions on 4-manifolds*, Canadian Journal of Mathematics. Journal Canadien de Mathématiques **74** (2022), no. 2, 550–572. MR 4411001
- [20] David Harari, *Galois cohomology and class field theory*, Universitext, Springer, Cham, 2020, Translated from the 2017 French original by Andrei Yafaev. MR 4174395
- [21] Allen Hatcher, *Algebraic topology*, Cambridge University Press, Cambridge, 2002. MR 1867354
- [22] ———, *Spectral Sequences*, Unpublished, 2004.
- [23] R. S. Kulkarni, *Pseudofree actions and Hurwitz's 84(g-1) theorem*, Mathematische Annalen **261** (1982), no. 2, 209–226. MR 675735

- [24] Sławomir Kwasik and Kyung Bai Lee, *Locally linear actions on 3-manifolds*, Mathematical Proceedings of the Cambridge Philosophical Society **104** (1988), no. 2, 253–260. MR 948910
- [25] Sławomir Kwasik and Reinhard Schultz, *Pseudofree group actions on  $S^4$* , American Journal of Mathematics **112** (1990), no. 1, 47–70. MR 1037602
- [26] Gene Lewis, *The integral cohomology rings of groups of order  $p^3$* , Transactions of the American Mathematical Society **132** (1968), 501–529. MR 223430
- [27] I. Madsen, C. B. Thomas, and C. T. C. Wall, *The topological spherical space form problem. II. Existence of free actions*, Topology. An International Journal of Mathematics **15** (1976), no. 4, 375–382. MR 426003
- [28] W. H. Mannan, *Periodic cohomology*, Homology, Homotopy and Applications **10** (2008), no. 2, 135–137. MR 2434932
- [29] John McCleary, *A user's guide to spectral sequences*, second ed., Cambridge Studies in Advanced Mathematics, vol. 58, Cambridge University Press, Cambridge, 2001. MR 1793722
- [30] Michael P. McCooey, *Concordance of  $\mathbb{Z}_p \times \mathbb{Z}_p$  actions on  $S^4$* , Algebraic & Geometric Topology **7** (2007), 785–796. MR 2308965
- [31] ———, *Four-manifolds which admit  $\mathbb{Z}_p \times \mathbb{Z}_p$  actions*, Forum Mathematicum **14** (2002), no. 4, 495–507. MR 1900171
- [32] ———, *Symmetry groups of four-manifolds*, Topology. An International Journal of Mathematics **41** (2002), no. 4, 835–851. MR 1905841
- [33] ———, *Groups that act pseudofreely on  $S^2 \times S^2$* , Pacific Journal of Mathematics **230** (2007), no. 2, 381–408. MR 2309166
- [34] John Milnor, *Groups which act on  $S^n$  without fixed points*, American Journal of Mathematics **79** (1957), 623–630. MR 90056
- [35] Peter Orlik and Frank Raymond, *Actions of the torus on 4-manifolds. I*, Transactions of the American Mathematical Society **152** (1970), 531–559. MR 268911
- [36] P. A. Smith, *Permutable periodic transformations*, Proceedings of the National Academy of Sciences of the United States of America **30** (1944), 105–108. MR 10278

- [37] Edwin H. Spanier, *Algebraic topology*, Springer-Verlag, New York, 1995, Corrected reprint of the 1966 original. MR 1325242
- [38] Richard G. Swan, *Minimal resolutions for finite groups*, Topology. An International Journal of Mathematics **4** (1965), 193–208. MR 179234
- [39] Tammo tom Dieck, *Transformation groups*, De Gruyter Studies in Mathematics, vol. 8, Walter de Gruyter & Co., Berlin, 1987. MR 889050
- [40] C. T. C. Wall, *On the structure of finite groups with periodic cohomology*, Lie Groups: Structure, Actions, and Representations, Progr. Math., vol. 306, Birkhäuser/Springer, New York, 2013, pp. 381–413. MR 3186699
- [41] Dariusz M. Wilczyński, *Group actions on the complex projective plane*, Transactions of the American Mathematical Society **303** (1987), no. 2, 707–731. MR 902793
- [42] Joseph A. Wolf, *Spaces of constant curvature*, sixth ed., AMS Chelsea Publishing, Providence, RI, 2011. MR 2742530
- [43] Tomoyoshi Yoshida, *Simply connected smooth 4-manifolds which admit nontrivial smooth  $S^1$  actions*, Mathematical Journal of Okayama University **20** (1978), no. 1, 25–40. MR 494173