

BACKGROUND READING ON BASIC COMBINATORICS, ALGEBRA AND TOPOLOGY

Books:

- J. Matousek, Using the Borsuk-Ulam Theorem, Springer, 2003: Chapters 1 and 4.
- J. R. Munkres, Elements of Algebraic Topology, Addison-Wesley, 1984: Chapters 1 and 2.
- R. P. Stanley, Enumerative Combinatorics, Vol. 1, Wadsworth, 1986: Chapter 3.
- R.P. Stanley, Combinatorics and Commutative Algebra, Second Ed., Birkhäuser, 1996: Chapters 0 and 2.
- G. Ziegler, Lectures on Polytopes, Springer, 1995: Chapters 2 and 8.

Survey articles:

- A. Björner, Topological Methods, in “Handbook of Combinatorics” (eds. R. Graham, M. Grötschel and L. Lovász), North-Holland, Amsterdam, 1995, pp. 1819–1872.
- A. Björner, Subspace arrangements, in “First European Congress of Mathematics, Paris 1992” (eds. A. Joseph et al.), Progress in Math. Series, Vol. 119, Birkhäuser, Boston, 1994, pp. 321–370.
- A. Björner, The homology and shellability of matroids and geometric lattices, in “Matroid Applications” (ed. N. White), Cambridge Univ. Press, 1992, pp. 226–283.
- L. J. Billera and A. Björner, Face numbers of polytopes and complexes, in “Handbook of Discrete and Computational Geometry” (eds. J. E. Goodman and J. O’Rourke), CRC Press, Boca Raton, Florida, 1997, pp. 291–310.
Updated version in Second Edition of *ibid.*, Chapman&Hall/CRC, 2004, pp. 407–430.