

---

## REFERENCES

---

**Books and Survey Articles** Six texts on knot theory are listed here. The book by Reidermeister, though dated,

offers an accessible account of many of the details not included here. Crowell and Fox focus on algebraic techniques, and include a careful presentation of the fundamental group. Basic algebraic topology is a prerequisite of Rolfsen's book, and Burde and Zieschang offer the most advanced treatment. Kauffman begins with an elementary presentation; the latter chapters call on a background in algebraic topology. Finally, Moran's book begins with a development of the basic tools of the subject, such as the fundamental group, and then focuses on the special topic of braids and the relation of braids to knots and links. Birman's book offers a more advanced treatment of braids.

Four survey articles are listed. The papers by Kauffman and by Lickorish and Millet are excellent introductions to the new combinatorial methods summarized in Chapter 10. Fox's "Quick Trip" includes a discussion of higher dimensional knots and also summarizes many of the methods and results of classical knot theory. The article by Gordon is an excellent survey from an advanced viewpoint.

## REFERENCES

## BOOKS

J.S. BIRMAN, *Braids, Links, and Mapping Class Groups*, Annals of Mathematics Studies Vol. 82, Princeton University Press, Princeton, 1974.

G. BURDE AND H. ZIESCHANG, *Knots*, de Gruyter Studies in Mathematics 5, Walter de Gruyter, Berlin-New York, 1985.

R. H. CROWELL AND R. H. FOX, *Introduction to Knot Theory*, Graduate Texts in Mathematics Vol. 57, Springer-Verlag, New York-Heidelberg-Berlin, 1977.

L. H. KAUFFMAN, *On Knots*, Annals of Mathematics Studies 115, Princeton University Press, Princeton, 1987.

S. MORAN, *The Mathematical Theory of Knots and Braids, An Introduction*, North-Holland Mathematical Studies 82, North-Holland, Amsterdam-New York-Oxford, 1983.

K. REIDEMEISTER, *Knotentheorie*, Ergebnisse der Mathematik, Vol. 1, Springer-Verlag, Berlin, 1932; L. F. Boron, C. O. Christenson, and B. A. Smith, (English translation), BCS Associates, Moscow, Idaho, 1983.

D. ROLFSEN, *Knots and Links*, Mathematics Lecture Series 7, Publish or Perish, Inc., Berkeley, 1976.

## SURVEY ARTICLES

R. H. FOX, *A quick trip through knot theory*, Topology of 3-Manifolds (M. K. Fort, Jr., ed.), Prentice-Hall, Englewood Cliffs, N. J., 1962.

C. McA. GORDON, *Aspects of classical knot theory*, Knot Theory, Lecture Notes in Math, Vol. 685, Springer-Verlag, New York, 1978.

L. H. KAUFFMAN, *New invariants in the theory of knots*, Am. Math. Monthly 95 (1988), 195-242.

W.B.R. LICKORISH AND K. MILLETT, *The new polynomial invariants of knots and links*, Mathematics Magazine **61** (1988), 3-23.

#### RESEARCH ARTICLES AND OTHER REFERENCES

Original sources for results described in the book are listed below.

E. A. ABBOTT, *Flatland*, Dover Publications, New York, 1952.

J. W. ALEXANDER, *Topological invariants of knots and links*, Trans. Amer. Math. Soc. **30** (1928), 275-306.

J. W. ALEXANDER AND G. B. BRIGGS, *On types of knotted curves*, Ann. of Math. (2) **28** (1927), 562-586.

E. ARTIN, *Theorie der Zöpfe*, Abh. Math. Sem. Univ. Hamburg **4** (1925), 47-72.

\_\_\_\_\_, *Theory of braids*, Ann. of Math. (2) **48** (1947), 101-126.

S. A. BLEILER, *A note on unknotting number*, Math. Proc. Camb. Phil. Soc. **96** (1984), 469-471.

J. H. CONWAY, *An enumeration of knots and links, and some of their algebraic properties*, Computational Problems in Abstract Algebra, Proc. Conf. Oxford 1967 (J. Leech, ed.), Pergamon Press, New York, 1970.

M. DEHN, *Die beiden Kleeblattschlingen*, Math. Ann. **75** (1914), 402-413.

A. EDMONDS, *Least area Seifert surfaces and periodic knots*, Topology and its Apps. **18** (1984), 109-113.

P. FREYD, D. YETTER, J. HOSTE, W. B. R. LICKORISH, K. MILLETT, AND A. OCNEANU, *A new polynomial invariant of knots and links*, Bull. Amer. Math. Soc. **12** (1985), 239-246.

C. McA. GORDON AND J. LUECKE, *Knots are determined by their complements*, Journal of the Amer. Math. Soc. **2** (1989), 371-415.

V. F. R. JONES, *A polynomial invariant for links via von Neumann algebras*, Bull. Amer. Math. Soc. **12** (1985), 103-112.

L. H. KAUFFMAN, *State models and the Jones polynomial*, Topology **26** (1987), 395-407.

M. KERVAIRE, *Knot cobordism in codimension 2*, Manifolds Amsterdam 1970, Lecture Notes in Math., Springer-Verlag, Berlin-Heidelberg-New York, 1971.

J. LEVINE, *Knot cobordism groups in codimension two*, Comm. Math. Helv. **45** (1969), 229-244.

W. H. MEEKS, AND S. T. YAU, *Topology of three dimensional manifolds and the embedding problem in minimal surface theory*, Ann. of Math. **112** (1980), 441-484.

K. MURASUGI, *On the genus of the alternating knot II*, J. Math. Soc. Japan **10** (1958), 235-248.

K. MURASUGI, *On periodic knots*, Comment. Math. Helv. **46** (1971), 162-174.

K. MURASUGI, *Jones polynomials and classical conjectures in knot theory I and II*, Topology **26** (1987), 187-194.

C. D. PAPAKYRIAKOPOULOS, *On Dehn's lemma and the asphericity of knots*, Ann. of Math. **66** (1957), 1-26.

K. PERKO, *On the classification of knots*, Proc. Amer. Math. Soc. **45** (1974), 262-266.

M. SCHARLEMANN, *Unknotting number one knots are prime*, Inv. Math. **82** (1985), 37-56.

O. SCHREIER, *Über die Gruppen  $A^aB^b = 1$* , Abh. Math. Sem. Univ. Hamburg **3** (1924), 167-169.

- H. SCHUBERT, *Die eindeutige Zerlegbarkeit eines Knotens in Primknoten*, S. Ber. Heidelberg, Akad. Wiss. 3. Abh. (1949), 57-104.
- \_\_\_\_\_, *Über eine numerische Knoteninvariante*, Math. Z. **61** (1954), 245-288.
- H. SEIFERT, *Über das Geschlect von Knoten*, Math. Ann. **110** (1934), 571-592.
- P. G. TAIT, *On knots*, Scientific Papers, Cambridge University Press, London, 1898.
- M. THISTLETHWAITE, *A spanning tree expansion of the Jones polynomial*, Topology **26** (1987), 297-309.
- \_\_\_\_\_, *Knot tabulations and related topics*, Aspects of Topology: In Memory of Hugh Dowker, 1912-1982 (I. M. James and E. H. Kronheimer, eds.), London Math. Soc. Lecture Notes Series 93, Camb. Univ. Press, Cambridge, 1985.
- H. TROTTER, *Non-invertible knots exist*, Topology **2** (1964), 341-358.
- F. WALDHAUSEN, *On irreducible 3-manifolds that are sufficiently large*, Ann. of Math. **87** (1968), 56-88.
- W. WHITTEN, *Inverting double knots*, Pacific J. of Math. **97** (1981), 209-216.
- E. C. ZEEMAN, *Twisting spun knots*, Trans. Amer. Math. Soc. **115** (1965), 471-495.

