Some books on Knot Theory

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May 8, 2013

1. Books on "real knots"
   - A. H. Verrill: Knots, splices and rope work, 1917.
   - C. Ashley: The Ashley book of knots (1944,... Very pretty!)
2. Semi-popular books on mathematical knots
   - A. Sossinsky: Knots. Mathematics with a twist (nice as a starter)
   - C. C. Adams: The knot book, 1994, 2001.
3. Intermediate level books
   - R. H. Crowell, R. Fox: Introduction to knot theory (1963: pre-Jones, but good treatment of knot group and Alexander polyn. via 'Fox calculus')
   - N. D. Gilbert, T. Porter: Knots and surfaces, 1994. (good treatment of topological foundations: surfaces, van Kampen, and of Seifert factorization, knot group, Alex.poly)
   - C. Livingston: Knot theory, 1993 (accessible, but too pedestrian for my taste)
   - **P. R. Cromwell: Knots and links**, 2004 (nice, recommended. Good treatment of Alex.poly via Seifert matrices.)
   - **K. Murasugi: Knot theory & its applications**, 1996 (same remarks as on Cromwell. In addition, chapters on Vassiliev inv., biology, chemistry)
4. More advanced books
   - D. Rolfsen: Knots and links. (1976: quite dated, pre-Jones, but still useful, stong on 3-manifold theory)
   - G. Burde, H. Zieschang: Knots. 1985, 2003 (good for classical theory. The 2nd edition has a short chapter on HOMFLY)
   - W. B. R. Lickorish: An introduction to knot theory, 1997 (Very good. Elementary constructions of HOMFLY and Kauffman polynomials)
   - L. Kauffman: On knots, 1987
   - A. Kawauchi: A survey of knot theory, 1990 (a lot of material, but quite concise)
   - V. Manturov: Knot theory, 2004 (a lot of material, but quite concise)
   - Reidemeister: Knotentheorie. (1932, first book on the subject. obviously outdated)
5. Knots and physics
   - M. Atiyah: The geometry and physics of knots
   - Baez (ed.): Knots and quantum gravity
   - Baez; Muniain: Gauge fields, knots and gravity
   - L. Kauffman: Knots and physics

6. Quantum (=categorical) knot theory

    - Kassel; Rosso; Turaev: Quantum groups and knot invariants
    - Prasolov, Sossinsky: Knots, links, braids and 3-manifolds
    - V. Turaev: Quantum invariants of knots and 3-manifolds
    - Yetter: Functorial knot theory

7. Other subjects

    - S. Chmutov, S. Duzhin, J. Mostovoy: Introduction to Vassiliev knot invariants
    - V. F. R. Jones: Subfactors and knots, 1991.
    - M. Morishita: Knots and Primes: An Introduction to Arithmetic Topology. 2012

8. History

    - J. C. Turner, P. van de Griend: History and science of knots, 1996.
    - M. Epple: Die Entstehung der Knotentheorie, 1999