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P. Freyd, D. Yetter, J. Hoste, W. B. R. Lickorish, K. C. Millett, and A. Ocneanu, "A New Polynomial Invariant of Knots and Links", <i>Bull. Amer. Math. Soc.</i> 12 (1985), 239–246.	12
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Y. Akutsu, T. Deguchi and M. Wadati, "Exactly Solvable Models and New Link Polynomials I–V", <i>J. Phys. Soc. Japan</i> 56 (1987), 3039–3051; 57 (1988), 3464–3479; 57 (1988), 757–776; 1173–1185; 1905–1923.	81
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Y. Akutsu and M. Wadati, "Knots, Links, Braids and Exactly Solvable Models in Statistical Mechanics", <i>Comm. Math. Phys.</i> 117 (1988), 243–259.	257
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- V. Jones, "On Knot Invariants Related to Some Statistical Mechanical Models", *Pacific J. Math.* 137 no 2 (1989). 313

- J. Murakami, "The Parallel Version of Polynomial Invariants of Links", *Osaka J. Math.* 26 (1989), 1–55. 337

ALGEBRAIC ASPECTS, BACKGROUND FROM C* ALGEBRAS

- V. Jones, "Index for Subfactors", *Invent. Math.* 72 (1983), 1–25. 395

- H. Wenzl, "Hecke Algebras of Type \mathcal{A}_n and Subfactors", *Invent. Math.* 92 (1988), 349–383. 420

- J. Birman and H. Wenzl, "Braids, Link Polynomials and a New Algebra", *Trans. AMS*, 313 (1989). 455

- J. Murakami, "The Kauffman Polynomial of Links and Representation Theory", *Osaka J. Math.* 24 (1987), 745–758. 480

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- L. Kauffman, "The Conway Polynomial", *Topology* 20 (1981), 101–108. 497

- S. Yamada, "The Minimal Number of Seifert Circles Equals the Braid Index of a Link", *Invent. Math.* 88 (1987), 347–356. 505

MISCELLANEOUS TOPICS ON NEW LINK POLYNOMIALS

- J. Birman, "On the Jones Polynomial of Closed 3-Braids", *Invent. Math.* 81 (1985), 287–294. 527

- K. Murasugi, "Jones Polynomials of Alternating Links", *Trans. Amer. Math. Soc.* 295 (1986), 147–174. 535

- K. Murasugi, "Jones Polynomials and Classical Conjectures in Knot Theory", *Topology* 26 (1987), 187–194. 563

- R. Brandt, W. Lickorish and K. Millett, "A Polynomial Invariant for Unoriented Knots and Links", *Invent. Math.* 84 (1986), 563–573. 571

- H. Morton and H. Short, "The 2-Variable Polynomials of Cable Knots", *Math. Proc. Camb. Phil. Soc.* 101 (1987), 267–278. 582

- H. Murakami, "On the Derivatives of the Jones Polynomials", *Kobe J. Math.* 3 (1986), 61–64. 594

H. Murakami, “A Formula for the Two-Variable Link Polynomial”, <i>Topology</i> 26 (1987), 409–412.	598
V. Turaev, “A Simple Proof of the Murasugi and Kauffman Theorems on Alternating Links”, <i>L'Enseign. Math.</i> 33 (1987), 203–225.	602
H. Morton and P. Traczyk, “The Jones Polynomial of Satellite Links Around Mutants”, <i>Contemporary Math.</i> 78 (1988), 587–592.	625
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 MONODROMY OF BRAID GROUPS, A RELATION WITH CONFORMAL FIELD THEORY	
A. Tsuchiya and Y. Kanie, “Vertex Operators in Conformal Field Theory on P^1 and Monodromy Representations of Braid Group”, <i>Advanced Studies in Pure Math.</i> 16 (1988), 297–372; Erratum, <i>ibid.</i> 19 (1989), 675–682.	643
T. Kohno, “Monodromy Representations of Braid Groups and Yang-Baxter Equations”, <i>Ann. Inst. Fourier</i> 37 (1987), 139–160. . . .	727
J. Frohlich, “Statistics of Fields, the Yang-Baxter Equation and the Theory of Knots and Links”, in “Non-Perturbative Quantum Field Theory”, eds. G. ’t Hooft et al. Plenum Press, 1988.	749
K. H. Rehren and B. Schroer, “Einstein Causality and Artin Braids”, <i>Nuclear Physics</i> B312 (1989), 715–750.	779
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