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81T45 Topological field theories in quantum mechanics
57Q45 Knots and links in high dimensions (PL-topology) (MSC2010)
81T10 Model quantum field theories
81T18 Feynman diagrams
05C31 Graph polynomials

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References:

- [1] <http://knotebook.org>
- [2] Mironov A and Morozov A 2015 *\textit{Nucl. Phys.}* B 899 395-413 · [Zbl 1331.81264](#)
- [3] Chern S-S and Simons J 1974 *\textit{Ann. Math.}* 99 48-69 · [Zbl 0283.53036](#)
- [4] Witten E 1989 *\textit{Commun. Math. Phys.}* 121 351-99 · [Zbl 0667.57005](#)
- [5] Alexander J W 1928 *\textit{Trans. Am. Math. Soc.}* 30 275-306
- [6] Jones V F R 1983 *\textit{Inventiones Math.}* 72 1 · [Zbl 0508.46040](#)
- [7] Jones V F R 1985 *\textit{Bull. AMS}* 12 103 · [Zbl 0564.57006](#)
- [8] Jones V F R 1987 *\textit{Ann. Math.}* 126 335 · [Zbl 0631.57005](#)
- [9] Freyd P, Yetter D, Hoste J, Lickorish W B R, Millet K and Ocneanu A 1985 *\textit{Bull. AMS}* 12 239 · [Zbl 0572.57002](#)
- [10] Przytycki J H and Traczyk K P 1987 *\textit{Kobe J. Math.}* 4 115-39
- [11] Conway J H 1970 Algebraic properties *\textit{Computational Problems in Abstract Algebra}* *\textit{(Proc. Conf. Oxford)}* ed J Leech (New York: Pergamon) pp 329-58
- [12] Ramadevi P, Govindarajan T R and Kaul R K 1994 *\textit{Mod. Phys. Lett.}* A 9 3205-18 · [Zbl 1015.57500](#)
- [13] Nawata S, Ramadevi P and Zodinmawia 2013 *\textit{J. Knot Theory Ramifications}* 22 13 · [Zbl 1296.57015](#)
- [14] Zodinmawia 2014 *\textit{PhD Thesis}* Indian Institute of Technology, Bombay
- [15] Galakhov D, Melnikov D, Mironov A, Morozov A and Sleptsov A 2015 *\textit{Phys. Lett.}* B 743 71-4 · [Zbl 1343.57007](#)
- [16] Galakhov D, Melnikov D, Mironov A and Morozov A 2015 *\textit{Nucl. Phys.}* B 899 194-228 · [Zbl 1331.81256](#)
- [17] Mironov A, Morozov A and Sleptsov A 2015 *\textit{J. High Energy Phys.}* JHEP07(2015) 069 · [Zbl 1388.57012](#)
- [18] Mironov A, Morozov A, Morozov A, Ramadevi P and Singh V K 2015 *\textit{J. High Energy Phys.}* JHEP15(2015) 109 · [Zbl 1388.57010](#)
- [19] Nawata S, Ramadevi P and Zodinmawia 2013 *\textit{Lett. Math. Phys.}* 103 1389-98 · [Zbl 1330.17020](#)
- [20] Gu J and Jockers H 2015 *\textit{Commun. Math. Phys.}* 338 393-456 · [Zbl 1328.81193](#)
- [21] Kauffman L 1987 *\textit{Topology}* 26 395-407 · [Zbl 0622.57004](#)
- [22] Kauffman L 1989 *\textit{Trans. Am. Math. Soc.}* 311 697-710
- [23] Morozov A, Morozov A and Morozov A 2014 *\textit{Phys. Lett.}* B 737 48-56 · [Zbl 1317.57010](#)
- [24] Bishler L, Morozov A, Morozov A and Morozov A 2015 *\textit{Int. J. Mod. Phys.}* A 30 1550074 · [Zbl 1329.57018](#)
- [25] Morozov A, Morozov A and Popolitov A 2015 *\textit{Phys. Lett.}* B 749 309-25 · [Zbl 1364.81141](#)
- [26] Vogel P 1999 The Universal Lie Algebra preprint see at <http://webusers.imj-prg.fr/~pierre.vogel/>
- [27] Mironov A, Mkrtchyan R and Morozov A 2015 arXiv:1510.05884
- [28] Westbury B W 2015 arXiv:1510.08307
- [29] Mironov A and Morozov A 2015 arXiv:1511.09077

- [30] Kaul R K and Govindarajan T R 1992 \textit{Nucl. Phys.} B 380 293-336 · Zbl 0938.81553
- [31] Ramadevi P, Govindarajan T R and Kaul R K 1993 \textit{Nucl. Phys.} B 402 548-66 · Zbl 0941.57500
- [32] Ramadevi P, Govindarajan T R and Kaul R K 1994 \textit{Nucl. Phys.} B 422 291-306 · Zbl 0990.81694
- [33] Ramadevi P and Sarkar T 2001 \textit{Nucl. Phys.} B 600 487-511 · Zbl 1097.81742
- [34] Zodinmawia and Ramadevi P 2011 arXiv:1107.3918
- [35] Zodinmawia and Ramadevi P 2012 arXiv:1209.1346
- [36] Mironov A, Morozov A and Morozov A 2012 \textit{J. High Energy Phys.} JHEP03(2012) 034 · Zbl 1309.81114
- [37] Mironov A, Morozov A and Morozov A 2013 \textit{Strings, Gauge Fields, and the Geometry Behind: The Legacy of Maximilian Kreuzer} (Singapore: World Scientific) pp 101-18
- [38] Gukov S, Nawata S, Saberi I, Stosic M and Sulkowski P 2016 \textit{J. High Energy Phys.} JHEP03(2016)004 · Zbl 1388.81823
- [39] Gelca R 2002 \textit{Math. Proc. Cambridge Phil. Soc.} 133 311-23 · Zbl 1017.57002
- [40] Gelca R and Sain J 2003 \textit{J. Knot Theory Ramifications} 12 187-201 · Zbl 1034.57005
- [41] Gukov S 2005 \textit{Commun. Math. Phys.} 255 577-627 · Zbl 1115.57009
- [42] Garoufalidis S 2004 \textit{Geom. Topol. Monogr.} 7 291-309
- [43] Itoyama H, Mironov A, Morozov A and Morozov A 2012 \textit{J. High Energy Phys.} JHEP12(2012) 131 · Zbl 1397.57012
- [44] Itoyama H, Mironov A, Morozov A and Morozov A 2012 \textit{Int. J. Mod. Phys.} A 27 1250099 · Zbl 1260.81134
- [45] Mironov A and Morozov A 2012 \textit{AIP Conf. Proc.} 1483 189-211 · Zbl 1291.81260
- [46] Garoufalidis S, Kucharski P and Sulkowski P 2016 \textit{Commun. Math. Phys.} 346 75-113 · Zbl 1365.57015
- [47] Kononov Y and Morozov A 2015 \textit{Pisma ZhETF} 101 931934
- [48] Kononov Y and Morozov A 2015 \textit{Phys. Lett.} B 747 500-10 · Zbl 1369.81068
- [49] Tierz M 2004 \textit{Mod. Phys. Lett.} A 19 1365-78 · Zbl 1076.81544
- [50] Brini A, Eynard B and Mariño M 2012 \textit{Ann. Henri Poincaré} 13 1873-910 · Zbl 1256.81086
- [51] Alexandrov A, Mironov A, Morozov A and Morozov A 2014 \textit{J. Exp. Theor. Phys. Lett.} 100 271-8
- [52] Alexandrov A and Melnikov D 2014 arXiv:1411.5698
- [53] Bar-Natan D <http://katlas.org>
- [54] Livingston C www.indiana.edu/~knotinfo/
- [55] Bar-Natan D and Greene J www.math.toronto.edu/~drorbn/Students/GreenJ/
- [56] Anokhina A, Mironov A, Morozov A and Morozov A 2013 \textit{Nucl. Phys.} B 868 271-313 · Zbl 1262.81073
- [57] Anokhina A, Mironov A, Morozov A and Morozov A 2013 \textit{Adv. High Energy Phys.} 2013 931830 · Zbl 1328.81123
- [58] Anokhina A and Morozov A 2014 \textit{Teor. Mat. Fiz.} 178 3-68
- [59] Anokhina A and Morozov A 2014 \textit{Theor. Math. Phys.} 178 1-58 · Zbl 1318.81055
- [60] Anokhina A, Mironov A, Morozov A and Morozov A 2014 \textit{Nucl. Phys.} B 882 C 171-94 · Zbl 1285.81035
- [61] Nawata S, Ramadevi P and Singh V K 2015 arXiv:1504.00364
- [62] Mironov A, Morozov A, Morozov A and Sleptsov A 2015 \textit{J. Mod. Phys.} A 30 1550169 · Zbl 1333.81202
- [63] Cherednik I 2013 \textit{Int. Math. Res. Not.} 2013 5366-425 · Zbl 1329.57019
- [64] Gorsky E, Gukov S and Stosic M 2013 arXiv:1304.3481
- [65] Rosso M and Jones V F R 1993 \textit{J. Knot Theory Ramifications} 2 97-112 · Zbl 0787.57006
- [66] Lin X-S and Zheng H 2010 \textit{Trans. Am. Math. Soc.} 362 1-18 · Zbl 1193.57006
- [67] Dunin-Barkowski P, Mironov A, Morozov A, Sleptsov A and Smirnov A 2013 \textit{J. High Energy Phys.} JHEP03(2013) 021 · Zbl 1342.57004
- [68] Dunfield N M, Gukov S and Rasmussen J 2006 \textit{Exp. Math.} 15 129-59 · Zbl 1118.57012
- [69] Mironov A, Morozov A and Morozov A 2013 \textit{AIP Conf. Proc.} 1562 123
- [70] Mironov A, Morozov A and Morozov A 2014 \textit{Mod. Phys. Lett.} A 29 1450183 · Zbl 1302.81134
- [71] Arthamonov S, Mironov A, Morozov A and Morozov A 2014 \textit{J. High Energy Phys.} JHEP04(2014) 156
- [72] Mironov A, Morozov A and Sleptsov A 2013 \textit{Theor. Math. Phys.} 177 1435-70 · Zbl 1336.57022
- [73] Mironov A, Morozov A and Sleptsov A 2013 \textit{Teor. Mat. Fiz.} 177 179-221
- [74] Mironov A, Morozov A and Sleptsov A 2013 \textit{Eur. Phys. J.} C 73 2492
- [75] Mironov A, Morozov A, Sleptsov A and Smirnov A 2014 \textit{Nucl. Phys.} B 889 757-77 · Zbl 1326.57030
- [76] Alexandrov A, Mironov A, Morozov A and Natanzon S 2014 \textit{J. High Energy Phys.} JHEP11(2014) 080 · Zbl 1333.81192
- [77] Alexandrov A, Mironov A and Morozov A 2007 \textit{Physica} D 235 126-67 · Zbl 1183.81082
- [78] Alexandrov A, Mironov A and Morozov A 2009 \textit{J. High Energy Phys.} JHEP12(2009) 053

- [79] Eynard B and Orantin N 2007 \textit{Commun. Number Theory Phys.}1 347-452 · [Zbl 1161.14026](#)
- [80] Orantin N 2008 arXiv:0808.0635
- [81] Dijkgraaf R, Fuji H and Manabe M 2011 \textit{Nucl. Phys.} B 849 166-211 · [Zbl 1215.81082](#)
- [82] Caudron A 1982 \textit{Classification des Nœuds et des Enlacements}\textit{(Publications Mathématiques d'Orsay vol 82-4)} (Orsay: University of Paris XI)
- [83] Gabai D 1986 \textit{Genera of Arborescent Links} vol 339 (Providence, RI: American Mathematical Soc)
- [84] Bonahon F and Siebenmann L C 2010 \textit{New Geometric Splittings of Classical Knots and the Classification and Symmetries of Arborescent Knots} www-bcf.usc.edu/~fbonahon/Research/Preprints/BonSieb.pdf
- [85] Guadagnini E, Martellini M and Mintchev M 1989 \textit{Proc. 8th Int. Workshop on Mathematical Physics : Quantum Groups}\textit{(Arnold Sommerfeld Institute, Clausthal, FRG, 19-26 July 1989)} pp 307-17
- [86] Guadagnini E, Martellini M, Mintchev M and Clausthal T U 1990 \textit{Phys. Lett.} B 235 275
- [87] Reshetikhin N Y and Turaev V G 1990 \textit{Commun. Math. Phys.}127 1-26 · [Zbl 0768.57003](#)
- [88] Mironov A, Morozov A and Natanzon S 2011 \textit{Theor. Math. Phys.}166 1-22 · [Zbl 1312.81125](#)
- [89] Mironov A, Morozov A and Natanzon S 2012 \textit{J. Geom. Phys.}62 148-55 · [Zbl 1242.22008](#)
- [90] Itoyama H, Mironov A, Morozov A and Morozov A 2013 \textit{Int. J. Mod. Phys.} A 28 1340009 · [Zbl 1259.81082](#)
- [91] Tuba I and Wenzl H 1999 math/9912013
- [92] Morton H R 2009 \textit{Math. Proc. Camb. Phil. Soc.}146 95-107 · [Zbl 1169.57010](#)
- [93] Schubert H 1956 \textit{Math. Z.}65 133170 · [Zbl 0071.39002](#)
- [94] Kauffman L H and Lambropoulou S 2003 \textit{L' Enseignement Mathématique}49 357410
- [95] Zieschang H 1984 \textit{Classification of Montesinos Knots Topology} (Berlin: Springer) p 378389
- [96] Wu Y-Q 1996 \textit{J. Differ. Geom.}43 171-97 · [Zbl 0851.57018](#)
- [97] Morton H and Cromwell P 1996 \textit{J. Knot Theory Ramifications}5 225-38 · [Zbl 0866.57002](#)

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