List of publications

1 Papers with referees

1. Zengo Tsuboi, Masuo Suzuki: Determining equations for higher-order decomposition of exponential operators, International Journal of Modern Physics B9 (1995) 3241-3268; arXiv:0912.0066 [math-ph].

2. Zengo Tsuboi, Atsuo Kuniba: Solutions of a discretized Toda field equation for D_r from Analytic Bethe Ansatz, Journal of Physics A: Mathematical and General 29 (1996) 7785-7796; arXiv:hep-th/9608002.

3. Zengo Tsuboi: Solutions of Discretized Affine Toda field equations for $A_n^{(1)}$, $B_n^{(1)}$, $C_n^{(1)}$, $D_n^{(1)}$, $A_n^{(2)}$ and $D_{n+1}^{(2)}$, Journal of the Physical Society of Japan 66 (1997) 3391-3398; arXiv:solv-int/9610011.

4. Zengo Tsuboi: Analytic Bethe ansatz and functional equations for Lie superalgebra $sl(r+1|s+1)$, Journal of Physics A: Mathematical and General 30 (1997) 7975-7991; arXiv:0911.5386 [math-ph].

5. Zengo Tsuboi: Analytic Bethe ansatz and functional equations associated with any simple root systems of the Lie superalgebra $sl(r+1|s+1)$, Physica A 252 (1998) 565-585; arXiv:0911.5387 [math-ph].

6. Zengo Tsuboi: Analytic Bethe ansatz related to a one-parameter family of finite-dimensional representations of the Lie superalgebra $sl(r+1|s+1)$, Journal of Physics A: Mathematical and General 31 (1998) 5485-5498; arXiv:0911.5389 [math-ph].

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8. Zengo Tsuboi: Analytic Bethe ansatz and functional relations related to tensor-like representations of type-II Lie superalgebras $B(r|s)$ and $D(r|s)$, Journal of Physics A: Mathematical and General 32 (1999) 7175-7206; arXiv:0911.5393 [math-ph].

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10. Kazumitsu Sakai, Zengo Tsuboi: Thermodynamic Bethe ansatz equation from fusion hierarchy of $osp(1|2)$ integrable spin chain, International Journal of Modern Physics A 15 (2000) 2329-2346; arXiv:math-ph/9912014.

11. Kazumitsu Sakai, Zengo Tsuboi: Thermodynamics of $osp(1|2)$ integrable spin chain: Finite size correction, Journal of the Physical Society of Japan 70 (2001) 367-371; arXiv:cond-mat/0011240 [cond-mat.stat-mech].

12. Atsuo Kuniba, Tomoki Nakanishi, Zengo Tsuboi: The Bethe equation at $q = 0$, the Möbius inversion formula, and weight multiplicities: III. the $X_N^{(r)}$ case, Letters in Mathematical Physics 59 (2002) 19-31; arXiv:math/0105146 [math.QA].

13. Atsuo Kuniba, Tomoki Nakanishi, Zengo Tsuboi: The canonical solutions of the Q-systems and the Kirillov-Reshetikhin conjecture, Communications in Mathematical Physics 227 (2002) 155-190; arXiv:math/0105145 [math.QA].

14. Goro Hatayama, Atsuo Kuniba, Masato Okado, Taichiro Takagi, Zengo Tsuboi: Paths, Crystals and Fermionic Formula, Progress in Mathematical Physics 23 (2002) 205-272; arXiv:math/0102113 [math.QA].

15. Zengo Tsuboi: A note on the $osp(1|2s)$ thermodynamic Bethe ansatz equation, International Journal of Modern Physics A 17 (2002) 2351-2368; arXiv:cond-mat/0108358 [cond-mat.stat-mech].

16. Zengo Tsuboi: Difference L operators and a Casorati determinant solution to the T-system for twisted quantum affine algebras, Journal of Physics A: Mathematical and General 35 (2002) 4363-4373; arXiv:0911.5368 [math-ph].

17. Zengo Tsuboi: Integral equations for thermodynamics of the $osp(1|2s)$ integrable spin chain, Physics Letters B 544 (2002) 222-230; arXiv:math-ph/0209024.

18. Zengo Tsuboi: Nonlinear integral equations for thermodynamics of the $sl(r+1)$ Uimin-Sutherland model, Journal of Physics A: Mathematical and General 36 (2003) 1493-1507; arXiv:cond-mat/0212280 [cond-mat.stat-mech].

19. Murray T. Batchelor, Xi-Wen Guan, Norman Oelkers, Kazumitsu Sakai, Zengo Tsuboi, Angela Foerster: Exact results for the thermal and magnetic properties of strong coupling ladder compounds, Physical Review Letters 91 (2003) 217202; arXiv:cond-mat/0309244 [cond-mat.stat-mech].

20. Zengo Tsuboi: From the quantum Jacobi-Trudi and Giambelli formula to a nonlinear integral equation for thermodynamics of the higher spin Heisenberg model, Journal of Physics A: Mathematical and General 37 (2004) 1747-1758; arXiv:cond-mat/0308333 [cond-mat.stat-mech].

21. Zengo Tsuboi, Minoru Takahashi: Nonlinear Integral Equations for Thermodynamics of the $U_q(\widehat{sl(r+1)})$ Perk-Schultz Model, Journal of the Physical Society of Japan 74 (2005) 898-904; arXiv:cond-mat/0412698 [cond-mat.stat-mech].

22. Zengo Tsuboi, Masahiro Shiroishi: High temperature expansion of emptiness formation probability for isotropic Heisenberg chain, Journal of Physics A: Mathematical and General 38 (2005) L363-L370; arXiv:cond-mat/0502569 [cond-mat.stat-mech].

23. Zengo Tsuboi: Nonlinear integral equations and high temperature expansion for the $U_q(\widehat{sl}(r+1|s+1))$ Perk-Schultz Model, Nuclear Physics B737 [FS] (2006) 261-290; arXiv:cond-mat/0510458 [cond-mat.stat-mech].

24. Zengo Tsuboi: A note on the high temperature expansion of the density matrix for the isotropic Heisenberg chain, Physica A377 (2007) 95-101; arXiv:cond-mat/0611454 [cond-mat.stat-mech].

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27. Zengo Tsuboi: Solutions of the T-system and Baxter equations for supersymmetric spin chains, Nuclear Physics B826 [PM] (2010) 399-455; arXiv:0906.2039 [math-ph].

28. Nikolay Gromov, Vladimir Kazakov, Zengo Tsuboi: $PSU(2,2|4)$ Character of Quasiclassical AdS/CFT, Journal of High Energy Physics 07 (2010) 097 (39 pages); arXiv:1002.3981 [hep-th].

29. Nikolay Gromov, Vladimir Kazakov, Sebastien Leurent, Zengo Tsuboi: Wronskian Solution for AdS/CFT Y-system, Journal of High Energy Physics 01 (2011) 155 (31 pages); arXiv:1010.2720 [hep-th].

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31. Zengo Tsuboi: Wronskian solutions of the T, Q and Y-systems related to infinite dimensional unitarizable modules of the general linear superalgebra $gl(M|N)$, Nuclear Physics B 870 [FS] (2013) 92-137; arXiv:1109.5524 [hep-th].

32. Alexander Alexandrov, Vladimir Kazakov, Sebastien Leurent, Zengo Tsuboi, Anton Zabrodin: Classical tau-function for quantum spin chains, Journal of High Energy Physics 09 (2013) 064 (64 pages); arXiv:1112.3310 [math-ph].

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34. Sergey Khoroshkin, Zengo Tsuboi: The universal R-matrix and factorization of the L-operators related to the Baxter Q-operators, Journal of Physics A: Mathematical and Theoretical 47 (2014) 192003 (11 pages); arXiv:1401.0474 [math-ph].

35. Zengo Tsuboi: Asymptotic representations and q-oscillator solutions of the graded Yang-Baxter equation related to Baxter Q-operators, Nuclear Physics B 886 (2014) 1-30; arXiv:1205.1471 [math-ph].

36. Zengo Tsuboi, Anton Zabrodin, Andrei Zotov: Supersymmetric quantum spin chains and classical integrable systems, Journal of High Energy Physics 05 (2015) 086 (42 pages); arXiv:1412.2586 [math-ph].

37. Vladimir Mitev, Matthias Staudacher, Zengo Tsuboi: The Tetrahedron Zamolodchikov Algebra and the $AdS_5 \times S^5$ S-matrix, Communications in Mathematical Physics 354 (2017) 1-30; arXiv:1210.2172 [math-ph].

38. Zengo Tsuboi: Quantum groups, Yang-Baxter maps and quasi-determinants, Nuclear Physics B 926 (2018) 200-238; arXiv:1708.06323 [math-ph].

39. Pascal Baseilhac, Zengo Tsuboi: Asymptotic representations of augmented q-Onsager algebra and boundary K-operators related to Baxter Q-operators, Nuclear Physics B 929 (2018) 397-437; arXiv:1707.04574 [math-ph].

2 Paper without referees

40. Zengo Tsuboi: T-system and thermodynamic Bethe ansatz equations for solvable lattice models associated with superalgebras, Bilinear method in the study of integrable systems and related topics (Kyoto, 2001), RIMS Kokyuroku 1280 (2002) 19-34; arXiv:0912.0073 [math-ph].

3 Thesis

41. Zengo Tsuboi: Study on the basis of the higher-order decomposition of exponential operators (in Japanese), (108 pages), Department of Physics, Graduate School of Science, the University of Tokyo (master thesis, no.6507), March 1995.

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