Selected list of 44 publications of V.B. Petkova

6. V.K. Dobrev, V.B. Petkova, S.G. Petrova and I.T. Todorov, Dynamical derivation of vacuum operator product expansion in euclidean conformal quantum field theory, Phys. Rev. **D13** (1976) 887-912,

8. V.K. Dobrev, G. Mack, V.B. Petkova, S.G. Petrova and I.T. Todorov, *Harmonic analysis on the n-dimensional Lorentz group and its application to conformal quantum field theory*, **monograph**, Lecture Notes in Physics, vol. **63** (1977) 1-280.

9. V.K. Dobrev and V.B. Petkova, Elementary representations and intertwining operators for the group $SU^*(4)$, Rep. Math. Phys. **13** (1978) 233-277.

10. I.T. Todorov, M.C. Mintchev and V.B. Petkova, *Conformal invariance in quantum field theory*, **monograph**, SNS Pisa, (1978).

11. G. Mack and V.B. Petkova, Comparison of lattice gauge theories with gauge groups $\mathbb{Z}_2$ and $SU(2)$, Ann. Phys. **123** (1979) 442-467.

12. G. Mack and V.B. Petkova, Sufficient condition for confinement of static quarks by a vortex condensation mechanism, Ann. Phys. **125** (1980) 117-134.

18. V.B. Petkova, G.M. Sotkov and I.T. Todorov, Conformal gauges and renormalized equations of motion in massless QED, Comm. Math. Phys. **97** (1985) 227-256.

20. V.K. Dobrev and V.B. Petkova, Group-theoretical approach to extended conformal supersymmetry: function space realizations and invariant differential operators, Fortschr. Phys. **35** (1987) 537-572.

21. V.K. Dobrev and V.B. Petkova, All positive energy unitary irreducible representations of the extended conformal supersymmetry, Phys. Lett. **B162** (1985) 127-132.

22. P. Furlan, V.B. Petkova and G.M. Sotkov, Indecomposable representations of the conformal group: a nonsingular photon - Weyl graviton system, J. Math. Phys. **28**(1987) 251-257.

23. V.B. Petkova, Two-dimensional (half-) integer spin conformal theories with central charge $c < 1$, Int. J. Mod. Phys. **A3** (1988) 2945-2958 (Sofia preprint and Trieste preprint INFN /AE-87/6).

25. V.B. Petkova, Structure constants for the (A, D) $c < 1$ minimal conformal theories, Phys. Lett. **B225** (1989) 357-362.

26. P. Furlan, A.Ch. Ganchev and V.B. Petkova, Fusion matrices and $c < 1$ (quasi) local conformal theories, Int. J. Mod. Phys. **A5** (1990) 2721-2735.

27. A.Ch. Ganchev and V.B. Petkova, $U_q(sl(2))$ invariant operators and minimal theories fusion matrices, Phys. Lett. **B233** (1989) 374-382.

28. P. Furlan, A.Ch. Ganchev and V.B. Petkova, Quantum groups and fusion rules multiplicities, Nucl. Phys. **B343** (1990) 205-227.

30. P. Furlan, A.Ch. Ganchev, R. Paunov and V.B. Petkova, Reduction of the rational spin $sl(2, \mathbb{C})$ WZNW conformal theory, Phys. Lett. **B267** (1991) 63-70.

31. P. Furlan, A.Ch. Ganchev, R. Paunov and V.B. Petkova, Solutions of the Knizhnik - Zamolodchikov equation with rational isospins and the reduction to the minimal models, Nucl. Phys. **B394** (1993) 665-706, hep-th/9201080.

32. A.Ch. Ganchev and V.B. Petkova, Reduction of the Knizhnik - Zamolodchikov equation - a way of producing Virasoro singular vectors, Phys. Lett. **B293** (1992) 56-66, hep-th/9207032.

33. A.Ch. Ganchev and V.B. Petkova, Virasoro singular vectors via quantum DS reduction, Phys. Lett. **B318** (1993) 77-84, hep-th/9308037.

34. P. Furlan, A.Ch. Ganchev and V.B. Petkova, On $\hat{sl}(3)$ reduction, quantum gauge transformations, and W_3 – algebras singular vectors, Phys. Lett. **B318** (1993) 85-91, hep-th/9308038.

35. P. Furlan, A.Ch. Ganchev and V.B. Petkova, Singular vectors of $\mathcal{W}$ algebras via DS reduction of $A_2^{(1)}$, Nucl. Phys. **B431** (1994) 622-664, hep-th/9403075.

36. V.B. Petkova and J.-B. Zuber, On structure constants of $sl(2)$ theories, Nucl. Phys. **B438** (1995) 347-372, hep-th/9410209.

37. V.B. Petkova and J.-B. Zuber, From CFT to graphs, Nucl. Phys. **B463** (1996) 161-193, hep-th/9510175.

38. P. Furlan, A.Ch. Ganchev and V.B. Petkova, $A_1^{(1)}$ admissible representations –fusion transformations and local correlators, Nucl. Phys. **B491** , no. 3 [PM] (1997) 635-658, hep-th/9608018.

39. P. Furlan, A.Ch. Ganchev and V.B. Petkova, Fusion rules for admissible representations of affine algebras: the case of $A_2^{(1)}$, Nucl. Phys. **B518** [PM] (1998) 645-668, hep-th/9709103.

40. P. Furlan, A.Ch. Ganchev and V.B. Petkova, An extension of the character ring of $sl(3)$ and its quantisation, Comm. Math. Phys. **202** (1999) 701-733, math.QA/9807106.

41. R.E. Behrend, P.A. Pearce, V.B. Petkova and J.-B. Zuber, On the classification of bulk and boundary conformal field theories, Phys. Lett. **B444** (1998) 163-166, hep-th/9809097.

43. R.E. Behrend, P.A. Pearce, V.B. Petkova and J.-B. Zuber, Boundary conditions in rational conformal field theories, (Nucl. Phys. **B570 (3)** [FS], 2000, 525-589) Nucl. Phys. **B579** [FS], (2000) 707-773, hep-th/9908036.

45. V.B. Petkova and J.-B. Zuber, Generalised twisted partition functions, Phys. Lett. **B504** (2001) 157-164, hep-th/0012021.

46. V.B. Petkova and J.-B. Zuber, The many faces of Ocneanu cells, Nucl. Phys. **B603** (2001) 449-496, hep-th/0101151.

48. I.K. Kostov and V.B. Petkova, Bulk correlation functions in 2D quantum gravity, Theor. Math. Phys. **146** (1) (2006) 108-118 (translated from TMF **146**, No. 1 (2006) 132-145), hep-th/0505078. citations: 39

49. I.K. Kostov and V.B. Petkova, Non-rational 2d quantum gravity: I. World sheet CFT, Nucl. Phys. **B 770** [FS] (2007) 273-331, hep-th/0512346.

51. P. Furlan, V.B. Petkova and M. Stanishkov, Non-critical string pentagon equations and their solutions, J. Phys. A: Math. Theor. 42 (2009) 304016, arXiv:0805.0134 [hep-th].

53. V.B. Petkova, On the crossing relation in the presence of defects, JHEP **04** (2010) 061, arXiv: 0912.5535.

54. P. Bozhilov, P. Furlan, V.B. Petkova and M. Stanishkov, On the semiclassical 3-point function in AdS$_3$, Phys. Rev. **D 86** (2012) 066005, arXiv:1204.1322.

55. P. Furlan and V.B. Petkova, On some 3-point functions in the W_4 CFT and related braiding matrix, JHEP **12** (2015) 079, arXiv:1504.07556.

56. P. Furlan and V.B. Petkova, W_4 Toda example as hidden Liouville CFT, Physics of Particles and Nuclei Letters Vol. **14**, No. 2 (2017) 286 - 290, arXiv:1606.02535.

58. I. Kostov, V.B. Petkova, D. Serban, Determinant formula for the octagon form factor in N = 4 SYM, Phys. Rev. Lett. **122** (2019), 231601, arXiv:1903.05038.

59. I. Kostov, V.B. Petkova, D. Serban, The octagon as a determinant, JHEP **11** (2019) 178, arXiv:1905.11467.

60. I. Kostov, V.B. Petkova, Octagon with finite bridge: free fermions and determinant identities, arXiv: 2102.05000 [hep-th] (to appear in JHEP).

C14. V.B. Petkova, "Chiral Approach to the (Non)-Diagonal 2D Conformal Models", invited session (QFT) talk at the **XIII**th **International Congress of Mathematical Physics** (ICMP 2000), 17-23 July 2000, London, UK; contribution to the Proceedings, A. Fokas, A. Grigoryan, T. Kibble and B. Zegarlinski eds., p. 391-397 (International Press, 2001).

C15. V.B. Petkova and J.-B. Zuber, "Conformal Boundary Conditions and what they teach us", in **Non-Perturbative QFT Methods and their Applications**, Proceedings of the 24th Johns Hopkins Workshop, Bolyai College, Budapest, 19-21 August 2000, Z. Bajnok, P. Bantay, Z. Horvath and L. Palla eds., p. 1-35, (World Scientific, 2001), hep-th/0103007.

C16. V.B. Petkova and J.-B. Zuber, "Conformal field theories, graphs and quantum algebras", invited publication in **MATHPHYS ODYSSEY 2001 –Integrable Models and Beyond**, eds. M. Kashiwara and T. Miwa, p. 415-436 (Volume dedicated to Barry M. McCoy on the occasion of his 60th birthday), Prog.Math.Phys. 23 (2002) 415-435; Birkhauser, 2002, hep-th/0108236.

C17. V.B. Petkova and J.-B. Zuber, " Boundary conditions in charge conjugate $sl(N)$ WZW theories", hep-th/0201239; *short version of the preprint is published in:* Proceedings of the **NATO Advanced Research Workshop, Statistical Field Theories**, June, 2001, Villa Olmo, Como, Eds. A. Cappelli and G. Mussardo, p. 161-170 (Kluwer Academic Publishers, 2002).