

CURRICULUM VITAE

PERSONAL

Name: Isaev Alexey Petrovich
Sex: male
Date and place of birth: January 26, 1957, Dubna, Moscow Region, USSR
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EDUCATION AND DEGREES

1973 - 1979 Faculty of Physics, Moscow State University, Moscow, USSR.
Diploma in Physics, 1979
1979 - 1982 postgraduate student at the Institute for High Energy Physics,
Protvino, Moscow Region, USSR
1983 Ph.D (Candidate of Sciences), Degree in Theoretical and
Mathematical Physics.
Thesis: "Problems of Classical and Quantum Dynamics of
Relativistic String".
1997 Habilitation (Doctor of Sciences), Degree in Theoretical Physics.
Theme: "Discrete Systems with Chiral Structures
and Quantum Symmetries".

TITLE

2012 Professor, Theoretical Physics Chair

PROFESSIONAL EMPLOYMENT

1982 - 1986 Junior Researcher, Bogoliubov Laboratory of Theoretical Physics,
Joint Institute for Nuclear Research, Dubna, Moscow Region, Russia

1986 - 1998	Senior Researcher, Bogoliubov Laboratory of Theoretical Physics, Joint Institute for Nuclear Research, Dubna, Moscow Region, Russia
1998 - 1999	Leading Researcher, Bogoliubov Laboratory of Theoretical Physics, JINR, Dubna, Moscow Region, Russia
1999 - 2012	Leader of Group "Strings, Lattices and Quantum Symmetries", BLTP, JINR, Dubna, Moscow Reg., Russia
1999 - 2003	Leader of "Particles and Fields" theme group, BLTP, JINR, Dubna, Moscow Reg., Russia
Since 2003	Leader of "Modern Mathematical Physics" theme group, BLTP, JINR, Dubna, Moscow Reg., Russia
Since 2012	Deputy director of Bogoliubov Laboratory of Theoretical Physics, JINR, Dubna, Moscow Reg., Russia

VISITING APPOINTMENTS

April, 1999	Visiting Professor, CPT in Luminy, Marseille University
June, 2000	Short-term Visitor, TH Division, CERN
November, 2000	Visiting Professor, Physikalisches Institut, Universität Bonn
October, 2001	Short-term Visitor, Dep. of Theor. Phys., Torino University
01.01 - 30.06, 2002	Visiting Professor, Max-Plank-Institut für Mathematik, Bonn
October, 2003	Short-term Visitor, TH Division, CERN
01.03 - 30.05, 2004	Visiting Professor, CPT in Luminy, Marseille University
01.10 - 30.12, 2004	Visiting Professor, Max-Plank-Institut für Mathematik, Bonn
09.10 - 09.12, 2007	Visiting Professor, CPT in Luminy, Marseille University
Novemebr, 2008	Visiting Scholar, The University of Sydney
29.09 - 29.11, 2010	Visiting Professor, The University of Sydney
01.04 - 30.04, 2013	Visiting Professor, The Indiana University- Purdue University Indianapolis, USA

TEACHING

2006 - 2012	The Lecture Course in Symmetries and Group Theory, International University "Dubna ", Dubna, Moscow Reg.
2008 - 2012	The Lecture Course in Group Theory and its Applications, Faculty of Physics, Moscow State University, Moscow.

List of Publications

1. V.V.Bazhanov and A.P.Isaev, Teor. Mat. Phys., **49** (1981)307, "On Equations for Contour Averages in Non-Abelian Gauge Theory".
2. A.P.Isaev, JETP Lett., **33** (1981)357, "Infinite Set of Integrals of Motion for Relativistic String".
3. V.I.Borodulin and A.P.Isaev, Phys. Lett., **117B** (1982)69, "On Infinite Set of Integrals of Motion for Closed Fermionic String".
4. A.P.Isaev, Teor. Mat. Phys., **54** (1983)209, "On Integrals of Motion for Closed Relativistic String".
5. S.G.Gorishny and A.P.Isaev, Teor. Mat. Phys., **62** (1985)345, "On an Approach to the Calculation of Massless Many-Loop Feynman Integrals".
6. A.P.Isaev, Communication of JINR E2-85-82, Dubna 1985, "Bosonic and Fermionic String Models in the Space of Lie Groups".
7. A.P.Isaev, Communication of JINR P2-86-16, Dubna 1986, "Auxiliary Spectral Problem for Fermionic String Theory", (in Russian).
8. A.P.Isaev, in Proceedings of the IX Workshop (Protvino, 1986) "Problems on High Energy Physics and Field Theory"; Moscow: Nauka 1987, p.207, "On Quantizing Scheme for Fermionic String", (in Russian).
9. A.P.Isaev, Teor. Mat. Phys., **71** (1987)395, "Fermionic String Model in Spaces of Lie Groups".
10. V.I.Borodulin and A.P.Isaev, Z.Phys. C, **38** (1988)659, "Integrability of Fermionic String in Superfield Hamiltonian Approach".
11. A.P.Isaev and E.A.Ivanov, in Proceedings of the International Seminar "Quarks'88" (Tbilisi, 1988); World Scientific 1988, p.569, "Zero Curvature Representation for Superstring Equations".
12. A.P.Isaev and E.A.Ivanov, Mod. Phys. Lett., **A4** (1989)351 , "On Sigma Model Formulation of Green-Schwarz Superstring".
13. A.P.Isaev and E.A.Ivanov, Teor. Mat. Phys., **81** (1989)420 , "Green-Schwarz Superstring as an Asymmetric Chiral Field Sigma Model".

14. A.T.Filippov and A.P.Isaev, Mod. Phys. Lett., **A4** (1989)2167, "Gauge Models of Discrete Strings".
15. A.T.Filippov and A.P.Isaev, in Proc. of the XXIII Intern. Symposium on the Theory of Elementary Particles (Arenshoop, Germany, October 1989) Institute of High Energy Physics, Berlin-Zeuthen, PHE 89-13 (1989) p.158, "Gauge Models of Fermionic Discrete Systems".
16. A.T.Filippov and A.P.Isaev, Mod. Phys. Lett., **A5** (1990)325, "Gauge Models of Fermionic Discrete Strings".
17. D.Gangopadhyay and A.P.Isaev, JINR Rapid Communications, No.6 [45]-90 (1990)35, "On the Harmonic Oscillator Realization of q-Oscillators"; [arXiv:hep-th/0701037].
18. A.P.Isaev and E.A.Ivanov, "Nonabelian $N = 2$ Superstrings", ICTP Internal Report IC/90/97 (1990); arXiv:0912.2200[hep-th]
19. A.P.Isaev and E.A.Ivanov, "Nonabelian $N = 2$ Superstrings: Hamiltonian Structure", ICTP Internal Report IC/91/86 (1991); arXiv:0912.2204[hep-th].
20. A.T.Filippov, D.Gangopadhyay and A.P.Isaev, J. Phys., **A24** (1991)L63, "Harmonic Oscillator Realization of the Canonical q-Transformation".
21. M.Chaichian, A.P.Isaev, J.Lukierski, Z.Popowicz and P.Presnajder, Phys. Lett. **B262** (1991)32, "q-Deformations of Virasoro Algebra and Conformal Dimensions".
22. A.T.Filippov, D.Gangopadhyay and A.P.Isaev, Int. J. of Mod. Phys. **A7** 15 (1992) 3639, "Discrete "Strings" and Gauge Model of Three Confined Particles".
23. A.T.Filippov, D.Gangopadhyay and A.P.Isaev, Int. J. of Mod. Phys. **A7** 11 (1992) 2487, "Quantum Discrete Gauge Models with Bosonic and Fermionic Degrees of Freedom".
24. A.P.Isaev and Z.Popowich, in Proceedings of 27 Winter School of Theoretical Physics (Karpacz, Poland, 1991), "Nonlinear Fields: Classical, Random, Semiclassical." World Scientific (1991), p.346, "q-Deformations of Conformal Algebra and Its Central Extension".

25. A.P.Isaev and Z.Popowicz, Phys.Lett. **B281** (1992) 271, "q-Trace for the Quantum Groups and q-Deformed Yang-Mills Theory".
26. A.P.Isaev and R.Malik, Phys.Lett. **B280** (1992) 219,
"Deformed Traces and Covariant Quantum Algebras for Quantum Groups $GL_{qp}(2)$ and $GL_{qp}(1/1)$ ".
27. A.T.Filippov, A.P.Isaev and A.B.Kurdikov, Mod.Phys.Lett. **A7** (1992) 2129,
"Paragrassmann Analysis and Quantum Groups".
28. A.T.Filippov, A.P.Isaev and A.B.Kurdikov, Teor. Math. Phys. **94** No.2 (1993) 213-231, "Paragrassmann Differential Calculus".
29. A.T.Filippov, A.P.Isaev and A.B.Kurdikov, Int.J.Mod.Phys. **8** No. 8 (1993),
"Paragrassmann Extensions of the Virasoro Algebra".
30. A.P.Isaev and P.N.Pyatov, Phys.Lett. **A179** (1993) 81-90, " $GL_q(N)$ -Covariant Quantum Algebras and Covariant Differential Calculus".
31. A.T.Filippov, A.P.Isaev, A.B.Kurdikov and P.N.Pyatov, in Proc. "XXVI International Symposium on the Theory of Elementary Particles" (9-13th Sept. 1992, Wendisch-Rietz, Germany). preprint DESY 93-013 (1993) p.107, "Paragrassmann Calculus and Covariant Quantum Algebras".
32. A.P.Isaev, in Proc. of 2nd Max Born Symposium, Wroclaw 1992, "Spinors, Twistors and Clifford Algebras" A.Borowiec, B.Jancewicz and Z.Oziewich (Eds.), (Kluwer Academic Publishers, 1993) p.309-316, "Cyclic Paragrassmann Representations for Covariant Quantum Algebras".
33. A.P.Isaev and Z.Popowicz, Phys.Lett. **B307** No.3,4 (1993) 353, "Quantum Group Gauge Theories and Covariant Quantum Algebras".
34. A.P.Isaev, in Proc. of XXII Intern. Conf. on Differential Geometric Methods in Theoretical Physics, (Ixtapa-Zihuatanejo, Mexico, September 1993), Eds. J.Keller and Z.Oziewics, Advances in Applied Clifford Algebras (Proc. Suppl.) 4 (S1) (1994) p.145, " $GL_q(N)$ - Covariant Noncommutative Geometry".
35. A.P.Isaev, J.Math.Phys. **35** (1994) 6784, "Quantum Group Covariant Noncommutative Geometry".

36. A.P.Isaev and Z.Popowich, in Proceedings of XXX Winter School of Theoretical Physics (Karpacz, Poland, 1994), "Quantum Groups. Formalism and Applications." Polish Scientific Publishers PWN (1995), p.259, " $SL_q(N)$ - Covariant Noncommutative Geometry".
37. A.P.Isaev and P.N.Pyatov, J.Phys. **A 28** (1995) 2227, "Covariant Differential Complexes on Quantum Linear Groups".
38. A.P.Isaev and A.A.Vladimirov, Lett.Math.Phys. **33** (1995) 297, "GLq(N)-Covariant Braided Differential Bialgebras".
39. A.P.Isaev, Lett.Math.Phys. **34** (1995) 333, "Interrelations Between Quantum Groups and Reflection Equation (Braided) algebras".
40. A.P.Isaev, Fiz. Elem. Chastits At. Yadra **26** No.5 (1995) 1204; English translation in *Phys.Part.Nucl.* **26** (5) (1995) 501, "Quantum Groups and Yang - Baxter Equations".
41. G.E.Arutyunov, A.P.Isaev, Z.Popowicz, J.Phys. A **28** (1995) 4349, "Poincaré - Birkhoff - Witt Property for Bicovariant Differential Algebras on Simple Quantum Groups".
42. A.P.Isaev, in Proc. of VII Intern. Conf. 'Symmetry Methods in Physics' (Dubna, July 1995) Eds. A.Sissakian and G.Pogosyan, Dubna E2-96-224 (1996) p.269, " $SL_q(N)$ Differential Calculus from the Differential Calculus on $GL_q(N)$ ".
43. A.P.Isaev, J.Phys. A **29** (1996) 6903, "Twisted Yang - Baxter Equations for Linear Quantum (Super)Groups".
44. A.P.Isaev and P.N.Pyatov, in Proc. of Workshop "Geometry and Integrable Models", Eds. P.Pyatov and S.Solodukhin, World Sci. (1996) p.182, "Differential Geometric Constructions for Linear Quantum Groups".
45. A.P. Isaev, Int.J.Mod.Phys. **A12** No.1 (1997) 201-206, "Paragrassmann Integral, Discrete Systems and Quantum Groups".
46. A.P.Isaev and P.P.Kulish, Mod.Phys.Lett. **A 12** (1997) 427, "Tetrahedron Reflection Equations".

47. A.P.Isaev, Fiz. Elem. Chastits At. Yadra **28** No.3 (1997) 685, English translation in *Phys.Part.Nucl.* **28** (3) (1997) 267, "R-Matrix Approach to Differential Calculus on Quantum Groups".
48. L.K.Hadjiivanov, A.P.Isaev, O.V.Ogievetsky, P.N.Pyatov and I.T.Todorov, J.Math.Phys. **40** No. 1 (1999) 427-448; "Hecke Algebraic Properties of Dynamical R-Matrices. Application to Related Quantum Matrix Algebras"; [q-alg/9712026](#).
49. A.P.Isaev, O.V.Ogievetsky and P.N.Pyatov, *Generalized Cayley-Hamilton-Newton Identities*, Czech. J. Phys. **48** No. 11 (1998) 1369-1374; [math.QA/9809047](#).
50. A.P.Isaev, O.V.Ogievetsky, P.N.Pyatov and P.Saponov, *Characteristic Polynomials for Quantum Matrices*, In Proc. of the Int. Seminar Dedicated to the Memory of V.I.Ogievetsky (Dubna, 1997), *Supersymmetries and Quantum Symmetries*, Eds. J.Wess and E.Ivanov, (Lecture Notes in Physics; Vol. 524), Springer (1999), pp. 322-330.
51. A.P.Isaev, O.V.Ogievetsky and P.N.Pyatov, *On Quantum Matrix Algebras Satisfying the Cayley-Hamilton-Newton Identities*, J. Phys. A: Math. Gen. **32** (1999) L115-L121; [math.QA/9809170](#).
52. A.T.Filippov, A.P.Isaev, *Path-Integral for Quadratic Hamiltonian Systems and Boundary Conditions*, in Proceedings of the 6th Intern. Conf. "Path Integrals from peV to TeV" (25-29 August, 1998), eds. R.Casalbuoni, R.Giachetti, a.o., World Scientific (1999), pp. 209-212; [hep-th/9810112](#).
53. M. Dubois-Violette, P. Furlan, L.K. Hadjiivanov, A.P. Isaev, P.N. Pyatov and I.T. Todorov, *A Finite Dimensional Gauge Problem in the WZNW Model*, Submitted to Proceedings "Quantum Theory and Symmetries" (18-22 July 1999, Goslar, Germany), World Scientific; [hep-th/9910206](#).
54. V.N. Tolstoy, O.V. Ogievetsky, P.N. Pyatov, A.P. Isaev, *Modified Affine Hecke Algebras and Drinfeldians of Type A*, In the Proceedings "Quantum Theory and Symmetries" (Goslar, July 18-22, 1999) World Scientific; [math.QA/9912063](#).
55. A. P. Isaev, O. V. Ogievetsky, P. N. Pyatov, *Cayley-Hamilton-Newton identities and quasitriangular Hopf algebras*, In the Proceedings of the Intern. Seminar "Supersymmetries and Quantum Symmetries" (27-31 July, 1999, Dubna, Russia); [math.QA/9912197](#).

56. A. Isaev, O.Ogievetsky, P.Pyatov, *Q-multilinear Algebra*, in Proc. of the International Workshop on "Lie Theory and Its Applications in Physics III" (11 - 14 July 1999, Clausthal, Germany), Eds. H.-D. Doebner a.o., World Sci. (2000) p. 268-279; [math.QA/9912231](#).
57. P. Furlan, L.K. Hadjiivanov, A.P. Isaev, O.V. Ogievetsky, P.N. Pyatov, I.T. Todorov, *Quantum matrix algebra for the $SU(n)$ WZNW model*, J. Phys. A **36** (2003) 5497, [hep-th/0003210](#).
58. C.Burdik, A.P.Isaev, O.Ogievetsky, *Standard Complex for Quantum Lie Algebras*, Report given at XXIII Int. Colloquium on Group Theoretical Methods in Physics, (July 31 - August 05, 2000, Dubna, Russia); Yad. Phys. **64** No. 12 (2001) 2101-2104; [math.QA/0010060](#).
59. A.P.Isaev, O.Ogievetsky, *On quantization of r-matrices for Belavin-Drinfeld Triples* Yad. Fiz. **64** No.12 (2001) 2126 - 2130; [math.QA/0010190](#).
60. E.E. Donets, A.P. Isaev, C. Sochichiu, M. Tsulaia, *Brane Vacuum as Chain of Rotators*, JHEP **12** (2000) 022; [hep-th/0011090](#).
61. A.P. Isaev and O.V. Ogievetsky, "BRST operator for quantum Lie algebras and differential calculus on quantum groups", Teor. Mat. Phys., **129**, No. 2 (2001) 289; [math.QA/0106206](#).
62. A.P.Isaev, P.N.Pyatov and V.Rittenberg, "Diffusion algebras", J. Phys. A: Math. Gen. **34** (2001) 5815–5834; [cond-mat/0103603](#).
63. A.P. Isaev, Z.Popowicz, O.P.Santillan "Generalized Grassmann Algebras and Extended Supersymmetric Models", Proc. of XVI Max Born Symposium, Karpacz - Poland 2001, "Supersymmetries and Quantum Symmetries", Eds. E. Ivanov et al., 131-143 (2002); [hep-th/0110246](#).
64. A.P.Isaev and O.V. Ogievetsky, "BRST and anti-BRST operators for quantum linear algebra $U_q(gl(N))$ ", in Proceedings of the International Conference on Supersymmetry and Quantum Field Theory: D.V. Volkov Memorial Conference (Ukraine, July 25-29, 2000), 6pp., *Nucl. Phys. Proc. Suppl.* **102**, 306–311 (2001).
65. A.P.Isaev and O.V. Ogievetsky, "Modified basis and quantum R-matrices corresponding to Belavin-Drinfeld triples", in New Developments in Fundamental Interaction Theories, (37th Karpacz Winter School of Theoretical Physics,

Karpacz, Poland, 6-15 February 2001), AIP Conf. Proceedings, Vol. 589, Melville, New York (2001) p. 241.

66. A. P. Isaev and D. V. Fursaev, "New Tunes In Modern Field Theory," Phys. Part. Nucl. **32S1** (2001) 31.
67. P. Aschieri, L. Castellani and A. P. Isaev, "Discretized Yang-Mills and Born-Infeld actions on finite group geometries," MPIM (Bonn) 2002 (4), DFTT-33-01, LMU-TPW-01-15, Jan 2002. 31pp; Int. J. Mod. Phys. A **18** (2003) 3555-3585; e-Print Archive: [hep-th/0201223](#).
68. V. A. Dolgushev, A. P. Isaev, S. L. Lyakhovich and A. A. Sharapov, "On the Fedosov deformation quantization beyond the regular Poisson manifolds," MPIM (Bonn) 2002 (59), Nucl. Phys. B **645** [PM] (2002) 457-476; e-Print Archive: [hep-th/0206039](#).
69. P. Aschieri, L. Castellani and A. P. Isaev, "Yang-Mills and Born-Infeld actions on finite group spaces," Presented at 24th International Colloquium on Group Theoretical Methods in Physics: GROUP - 24: (ICGTMP 2002), Paris, France, 15-20 Jul 2002, e-Print Archive: [hep-th/0210237](#).
70. A.P. Isaev and O.V. Ogievetsky, "BRST Operator for Quantum Lie Algebras: Explicit Formula", in Proceedings of 6th International Conf. "Conformal Field Theories and Integrable Models", Chernogolovka, September 2002, Int. J. Mod. Phys. A., Vol. 19, Supplement (2004) 240-247.
71. A. P. Isaev, "Multi-loop Feynman integrals and conformal quantum mechanics," Nucl. Phys. B **662** [PM] (2003) 461-475, e-Print Archive: [hep-th/0303056](#).
72. A.P. Isaev and S.M. Sergeev, "Quantum Lax operators and discrete $2 + 1$ dimensional integrable models", Lett.Math.Phys. **64** (2003) 57-64.
73. V.G. Gorbounov, A.P. Isaev and O.V. Ogievetsky, "BRST Operator for Quantum Lie Algebras: Relation to Bar Complex", Theor. Math. Phys., **139**, No. 1 (2004) 473-485; [arXiv:0711.4133v1 \[math.QA\]](#).
74. A.P. Isaev, O.V. Ogievetsky and P.N. Pyatov, On R - matrix representations of Birman-Murakami-Wenzl algebras, Trudy Steklov Math. Inst. **246** (2004) 147-153; [math.QA/0509251](#).

75. A.P. Isaev, "Quantum groups and Yang-Baxter equations", 115 pages, preprint MPIM2004-132, Bonn (2004).
76. A. P. Isaev and O. P. Santillan, "Heterotic geometry without isometries", Journal of High Energy Physics, 0510 (2005) 061; [hep-th/0508106](#).
77. A.P. Isaev and O.V. Ogievetsky, On representations of Hecke algebras, Czechoslovak Journal of Physics, Vol. 55, No. 11 (2005) 1433 – 1441.
78. A.P. Isaev and O.V. Ogievetsky, Representations of A-type Hecke algebras, Proceedings of International Workshop "Supersymmetries and Quantum Symmetries" (Dubna, July 27-31, 2005) 2006, pp. 132-141; [arXiv:0912.3701 \[math.QA\]](#).
79. A.P. Isaev and O.V. Ogievetsky, "On Baxterized Solutions of Reflection Equation and Integrable Chain Models", Nucl. Phys. B 760 [PM] (2007) 167-183; e-print [math-ph/0510078](#).
80. A.P. Isaev, A.F. Os'kin, "Open Hecke chains and free fermions", Czech. Journal of Phys. 56 No.10-11 (2006) 1197-1202.
81. A.P. Isaev, "Functional equations for transfer-matrix operators in open Hecke chain models", Theor. Math. Phys. **150** No.2 (2007) 187-202; [arXiv:1003.3385 \[math-ph\]](#).
82. A.P. Isaev, "Operator approach to analytical evaluation of Feynman diagrams", Physics of Atomic Nuclei, **71** No.5 (2008) 914-924; [arXiv:0709.0419 \[hep-th\]](#).
83. A.P. Isaev, O.V. Ogievetsky and A.F. Os'kin, "Chain models on Hecke algebra for corner type representations", Reports on Math. Phys. 61, No.2 (2008) 309 - 315; [arXiv:0710.0261 \[math.QA\]](#).
84. A. P. Isaev, S. O. Krivonos and O. V. Ogievetsky, "BRST operators for W algebras", J.Math.Phys.49:073512,2008; [arXiv:0802.3781 \[math-ph\]](#).
85. A. P. Isaev, S. O. Krivonos and O. V. Ogievetsky, "BRST charges for finite nonlinear algebras", Particles and Nuclei, Letters, 7 No.4 (2010) 373-383; [arXiv:0807.1820 \[math-ph\]](#).
86. A.P. Isaev, A.I. Molev, and A.F. Os'kin, "On the idempotents of Hecke algebras", Lett. Math. Phys. 85 (2008), 79-90; [arXiv:0804.4214 \[math.QA\]](#).

87. A.P. Isaev, P. Pyatov, "Spectral extension of the quantum group cotangent bundle", Comm.Math.Phys., 288 (2009) 1137-1179; e-print: [arXiv:0812.2225](https://arxiv.org/abs/0812.2225) [math.QA].
88. A.P. Isaev, O.V. Ogievetsky, Braids, Shuffles and Symmetrizers, J.Phys. A 42 No. 30 (2009) 304017; e-print [arXiv:0812.3974](https://arxiv.org/abs/0812.3974) [math.QA].
89. A. P. Isaev, A. I. Molev, "Fusion procedure for the Brauer algebra", Algebra i Analiz, 22, No.3 (2010) 142–154; e-print: [arXiv:0812.4113](https://arxiv.org/abs/0812.4113) [math.RT].
90. A. P. Isaev, O. V. Ogievetsky, Jucys-Murphy elements for Birman-Murakami-Wenzl algebras, in Proceedings of International Workshop "Supersymmetries and Quantum Symmetries", Dubna, 2009; Particles and Nuclei, Letters, Vol. 8, No.3(166) (2011) 394–407; [arXiv:0912.4010](https://arxiv.org/abs/0912.4010) [math.QA].
91. A. P. Isaev, A. I. Molev, O. V. Ogievetsky, A new fusion procedure for the Brauer algebra and evaluation homomorphisms, Int. Math. Research Notices, Volume 2012, Issue 11 (2012) 2571 – 2606 (DOI: 10.1093/imrn/rnr126); [arXiv:1101.1336](https://arxiv.org/abs/1101.1336) (math.RT).
92. A. P. Isaev, A. I. Molev, O. V. Ogievetsky, Idempotents for Birman-Murakami-Wenzl algebras and reflection equation, [arXiv:1111.2502](https://arxiv.org/abs/1111.2502) [math.RT]
93. D. Chicherin, S. Derkachov, A. P. Isaev, Conformal algebra: R-matrix and star-triangle relation, Journal of High Energy Physics (JHEP) 1304 (2013) 020 [arXiv:1206.4150](https://arxiv.org/abs/1206.4150) [math-ph].
94. A. P. Isaev and Anatol N. Kirillov, Bethe subalgebras in Hecke algebra and Gaudin models, [arXiv:1302.6495](https://arxiv.org/abs/1302.6495) (math.QA).
95. D. Chicherin, S. Derkachov, A. P. Isaev, Spinorial R-matrix , [arXiv:1303.4929](https://arxiv.org/abs/1303.4929) [math-ph].
96. A. P. Isaev, O. V. Ogievetsky, Half-quantum linear algebra, Talk at the XXIX International Colloquium on Group-Theoretical Methods in Physics, Chern Institute of Mathematics, Nankai University, Tianjin, China, August 20 - August 26, 2012 [arXiv:1303.3991](https://arxiv.org/abs/1303.3991) [math.QA].