

## Articles (published, or accepted)

1. F. Tremblay, A. V. Turbiner, and P. Winternitz. Periodic orbits for a family of classical superintegrable systems. *J.Phys.A.Math.Theor.*, 43(1):015202, 2009. (14 pages).
2. R.Rebelo and P.Winternitz. Ordinary differential and difference equations invariant under  $SL(2, R)$  and their solutions. *J. Phys. A. Math.Theor.*, 42:000000 (10 pages), 2009. (Special issue devoted to Symmetries and Integrability of Difference Equations).
3. P.Winternitz and I.Yurdusen. Integrable and superintegrable systems with spin in three-dimensional euclidean space. *J.Phys.A.Math.Theor.*, 42(38):38523 (20 pages), 2009.
4. F. Tremblay, A. V. Turbiner, and P. Winternitz. An infinite family of solvable and integrable quantum systems on a plane. *J.Phys.A.Math.Theor.*, 42(24):242001, 2009. (10 pages in Fast Track Communications).
5. P.Winternitz. Superintegrability with second and third order integrals of motion. *Russian J.Nucl.Phys*, 72(5):875–882, 2009.
6. L. Snobl and P. Winternitz. All solvable extensions of a class of nilpotent algebras of dimension  $n$  and degree of nilpotency  $n-1$ . *J. Phys. A. Math.Theor.*, 42(10):105201, 2009. (16 pages).
7. M.A. Rodriguez, P. Tempesta, and P. Winternitz. Reduction of superintegrable systems: The anisotropic harmonic oscillator. *Phys. Rev. E*, 78(4):046608 (6 pages), 2008.
8. Marquette I. and P. Winternitz. Superintegrable systems with third order integrals of motion. *J. Phys. A. Math.Theor.*, 41(30):303031 (10 pages), 2008.
9. A. Bourlioux, R. Rebelo, and P. Winternitz. Symmetry preserving discretization of  $SL(2, R)$  invariant equations. *J. Nonlinear Math. Phys.*, 15(Suppl.3):362–372, 2008.
10. G. Dattoli, D. Levi, and P. Winternitz. Heisenberg algebra, umbral calculus and orthogonal polynomials. *J. Math Phys.*, 49(5):053509, 2008. (19 pages).
11. F. Charest, C. Hudon, and P. Winternitz. Quasiseperation of variables in the Schrödinger equation with a magnetic field. *J.Math. Phys.*, 48(1):012105.1–16, 2007.
12. Marquette I. and P. Winternitz. Polynomial Poisson algebras for classical superintegrable systems with a third order integral of motion. *J.Math. Phys.*, 48(1):012902.1–16, 2007. (erratum 49,019907).

13. P. Winternitz and I. Yurdusen. Integrable and superintegrable systems with spin. *J.Math.Phys.*, 47(10):103509.1–10, 2006.
14. R. G. Smirnov and P. Winternitz. A class of superintegrable systems of Calogero type. *J.Math. Phys.*, 47(9):093505.1–8, 2006. (Erratum 48, 079907).
15. A. Bourlioux, C. Cyr-Gagnon, and P. Winternitz. Difference schemes with point symmetries and their numerical tests. *J.Phys. A*, 39(22):6877–6896, 2006.
16. D. Levi and P. Winternitz. Continuous symmetries of difference equations. *J.Phys. A*, 39(2):R1–R63, 2006.
17. F. Valiquette and P. Winternitz. Discretization of partial differential equations preserving their physical symmetries. *J.Phys.A*, 38(45):9765–9783, 2005.
18. L. Snobl and P. Winternitz. A class of solvable Lie algebras and their Casimir invariants. *J.Phys.A*, 38(12):2687–2700, 2005.
19. E.G. Kalnins, Z. Thomova, and P. Winternitz. Subgroup type coordinates in four-dimensional flat spaces. *J.Nonl.Math.Phys.*, 12(2):35–64, 2005.
20. F. Gungor and P. Winternitz. Equivalence classes and symmetries of the variable coefficient Kadomtsev- Petviashvili equation. *Nonlinear Dynamics*, 35(4):381–396, 2004.
21. D. Levi, P. Tempesta, and P. Winternitz. Umbral calculus, difference equations and the discrete Schroedinger equation. *J.Math.Phys.*, 45(11):4077–4105, 2004.
22. M.A. Rodriguez and P. Winternitz. Lie symmetries and exact solutions of first order difference schemes. *J.Phys.A.*, 37(23):6129–6142, 2004.
23. A.V. Penskoi and P. Winternitz. Discrete Riccati equations with superposition formulas. *J.Math.Anal.Appl.*, 294(2):533–547, 2004.
24. D. Levi, P. Tempesta, and P. Winternitz. Lorentz and Galilei invariance on lattices. *Phys.Rev.D.*, 69(10):105011,1–6, 2004.
25. J. Bérubé and P. Winternitz. Integrable and superintegrable quantum systems in a magnetic field. *J.Math.Phys*, 45(5):1959–1973, 2004.
26. V. Dorodnitsyn, R. Kozlov, and P. Winternitz. Continuous symmetries of Lagrangians and exact solutions of discrete equations. *J.Math.Phys.*, 45(1):336–359, 2004.
27. V. Dorodnitsyn, R. Kozlov, and P. Winternitz. Symmetries, Lagrangian formalism and integration of second order ordinary difference equations. *J. Nonlinear Math. Phys.*, 10, Suppl. 2:41–56, 2003.

28. E.G. Kalnins, J.M. Kress, W. Miller, Jr., and P. Winternitz. Superintegrable systems in Darboux spaces. *J.Math.Phys.*, 44(12):5811–5848, 2003.
29. M. A. Grundland, P. Tempesta, and P. Winternitz. Weak transversality and partially invariant solutions. *J. Math. Phys.*, 44(6):2704–2722, 2003.
30. G. Pogosyan, A. Sissakian, and P. Winternitz. Separation of variables and Lie algebra contractions. Applications to special functions. *Phys. Elem. Part. Nucl.*, 33(7):235–276, 2002.
31. F. Güngör and P. Winternitz. Generalized Kadomtsev–Petviashvili equation with an infinite dimensional symmetry algebra. *J. Math. Anal. Appl.*, 276(1):314–328, 2002.
32. S. Gravel and P. Winternitz. Superintegrability with third order integrals in quantum and classical mechanics. *J. Math. Phys.*, 43(12):5902–5912, 2002.
33. G. S. Pogosyan and P. Winternitz. Separation of variables and subgroup bases on n-dimensional hyperboloids. *J. Math. Phys.*, 43(6):3387–3410, 2002.
34. M. A. Rodriguez and P. Winternitz. Quantum superintegrability and exact solvability in n dimensions. *J. Math. Phys.*, 43(3):1309–1322, 2002.
35. E. G. Kalnins, J. Kress, and P. Winternitz. Superintegrability in a two-dimensional space of nonconstant curvature. *J. Math Phys.*, 43(2):970–983, 2002.
36. D. Levi and P. Winternitz. Lie point symmetries and commuting flows for equations on lattices. *J. Phys. A.*, 35(9):2249–2262, 2002.
37. D. Levi, S. Tremblay, and P. Winternitz. Lie symmetries of multidimensional difference equations. *J. Phys. A.*, 34(44):9507–9524, 2001.
38. L. Martina, M. B. Sheftel, and Winternitz P. Group foliation and non-invariant solutions of the heavenly equations. *J. Phys. A.*, 34(43):9243–9263, 2001.
39. S. Tremblay and P. Winternitz. Invariants of nilpotent and solvable triangular Lie algebras. *J. Phys. A*, 34(42):9085–9099, 2001.
40. S. Lafortune, S. Tremblay, and P. Winternitz. Symmetry classification of diatomic molecular chains. *J. Math. Phys.*, 42(11):5341–5357, 2001.
41. R. Hernandez Heredero, D. Levi, and P. Winternitz. Symmetries of the discrete nonlinear Schrödinger equation. *Theor. Math. Phys*, 127(3):729–737, 2001.

42. P. Tempesta, A. V. Turbiner, and P. Winternitz. Exact solvability of superintegrable systems. *J. Math. Phys.*, 42(9):4248–4257, 2001.
43. D. Levi, S. Tremblay, and P. Winternitz. Continuous symmetries of equations on lattices. *Czech. J. Phys.*, 51(4):349–356, 2001.
44. M. B. Sheftel, P. Tempesta, and P. Winternitz. Recursion operators, higher order symmetries and superintegrability in quantum mechanics. *Czech J. Phys.*, 51(4):392–399, 2001.
45. M. B. Sheftel, P. Tempesta, and P. Winternitz. Superintegrable systems in quantum mechanics and classical Lie theory. *J. Math. Phys.*, 42(2):659–673, 2001.
46. R. Hernandez-Heredero, D. Levi, M. A. Rodriguez, and P. Winternitz. Relation between Bäcklund transformations and higher continuous symmetries of the Toda equation. *J. Phys. A*, 34(11):2459–2465, 2001.
47. A. A. Izmistiev, G. S. Pogosyan, A. N. Sissakian, and P. Winternitz. Contractions of Lie algebras and the separation of variables: interbase expansions. *J. Phys. A*, 34(3):521–554, 2001.
48. D. Levi, S. Tremblay, and P. Winternitz. Lie point symmetries of difference equations and lattices. *J. Phys. A*, 33(47):8507–8524, 2000.
49. A. M. Grundland, M. B. Sheftel, and P. Winternitz. Invariant solutions of equations of the hydrodynamic type. *J. Phys. A*, 33(46):8193–8215, 2000.
50. L. Martina, S. Lafortune, and P. Winternitz. Point symmetries of generalized Toda field theories II. Symmetry reduction. *J. Phys. A*, 33(36):6431–6446, 2000.
51. N. Atakishiyev and P. Winternitz. Bases for representations of quantum algebras. *J. Phys. A*, 33(30):5303–5313, 2000.
52. R. Hernandez-Heredero, D. Levi, M. A. Rodriguez, and P. Winternitz. Lie algebra contractions and symmetries of the Toda hierarchy. *J. Phys. A*, 33(28):5025–5040, 2000.
53. V. Dorodnitsyn and P. Winternitz. Lie point symmetry preserving discretizations for variable coefficient Korteweg–de Vries equations. *Nonlinear Dynamics*, 22(1):49–59, 2000.
54. S. Lafortune, L. Martina, and P. Winternitz. Point symmetries of generalized Toda field theories. *J. Phys. A*, 33(12):2419–2435, 2000.
55. E. McSween and P. Winternitz. Integrable and superintegrable Hamiltonian systems in magnetic fields. *J. Math. Phys.*, 41(5):2957–2967, 2000.

56. Yu. Yu Berest and P. Winternitz. Huygens' principle and separation of variables. *Rev. Math. Phys.*, 12(2):159–180, 2000.
57. V. Dorodnitsyn, R. Kozlov, and P. Winternitz. Lie group classification of second -order ordinary difference equations. *J. Math. Phys.*, 41(1):480–504, 2000.
58. A. Ankiewicz, A. A. Akhmediev, and P. Winternitz. Singularity analysis, balance equations and soliton solution of nonlocal complex Ginzburg Landau equation. *J. Engin. Math.*, 36(1):11–24, 1999.
59. Z. Thomova and P. Winternitz. Maximal abelian subalgebras of pseudoeuclidean Lie algebras. *Lin. Alg. Appl.*, 291(3):245–274, 1999.
60. D. Gomez-Ullate, S. Lafortune, and P. Winternitz. Symmetries of discrete dynamical systems involving two species. *J. Math. Phys.*, 40(6):2782–2804, 1999.
61. M. Havlíček, S. Posta, and P. Winternitz. Nonlinear superposition formulas based on imprimitive group action. *J. Math. Phys.*, 40(6):3104–3122, 1999.
62. M A. Ayari, V. Hussin, and P. Winternitz. Group invariant solutions for the super Korteweg–de Vries equation ( $N = 2$ ). *J. Math. Phys.*, 40(4):1951–1965, 1999.
63. R. Hernandez Heredero, D. Levi, and P. Winternitz. Symmetries of the discrete Burgers equation. *J. Phys. A*, 32(14):2685–2695, 1999.
64. J. Patera, G. Pogosyan, and P. Winternitz. Graded contractions of the Lie algebra  $e(2,1)$ . *J. Phys. A*, 32(5):805–826, 1999.
65. A. A. Izmet'ev, G. S. Pogosyan, A. N Sissakian, and P. Winternitz. Contractions of Lie algebras and separation of variables. The n-dimensional sphere. *J. Math. Phys.*, 40(3):1549–1573, 1999.
66. S. Lafortune, C. R. Menyuk, and P. Winternitz. Solutions to the optical cascading equations. *Phys. Rev. E*, 58(2):2518–2525, 1998.
67. Z. Thomova, P. Winternitz, and W. J. Zakrzewski. Solutions of (2+1)-dimensional spin systems. *J. Math. Phys.*, 39(7):3927–3944, 1998.
68. Z. Thomova and P. Winternitz. Maximal Abelian subgroups of the isometry and conformal groups of Euclidean and Minkowski spaces. *J. Phys. A*, 31(7):1831–1858, 1998.
69. S. Tremblay and P. Winternitz. Solvable Lie algebras with triangular nilradicals. *J. Phys. A*, 31(2):789–806, 1998.

70. C. Rogers, W. Schief, and P. Winternitz. Lie theoretical generalization and discretization of the Pinney equation. *J. Math. Anal. Appl.*, 216:246–264, 1997.
71. Yu. A. Orlov and P. Winternitz.  $P_\infty$  algebra of the KP equation, free fermions and a 2-cocycle in the Lie algebra of pseudodifferential operators. *Int. J. Mod. Phys. B*, 11:3159–3193, 1997.
72. A. Yu. Orlov and P. Winternitz. Algebra of pseudodifferential operators and symmetries of equations in the Kadomtsev–Petviashvili hierarchy. *J. Math. Phys.*, 38:4644–4674, 1997.
73. A. Sciarrino and P. Winternitz. Symmetries and solutions of the vector nonlinear Schrödinger equation. *Nuovo Cim.*, 112 B(6):853–871, 1997.
74. D. Levi, L. Vinet, and P. Winternitz. Lie group formalism for difference equations. *J. Phys. A*, 30(2):633–649, 1997.
75. M Ait Abdelmalek, X. Leng, J. Patera, and P. Winternitz. Grading refinements in the contractions of Lie algebras and their invariants. *J. Phys. A*, 29:7519–7543, 1996.
76. F. Güngör, M. Sanielevici, and P. Winternitz. On the integrability properties of variable coefficient Korteweg–de Vries equations. *Can. J. Phys.*, 74:676–684, 1996.
77. D. Levi and P. Winternitz. Symmetries of discrete dynamical systems. *J. Math. Phys.*, 37:5551–5576, 1996.
78. A. A. Izmet'ev, G. S. Pogosyan, A. N. Sissakian, and P. Winternitz. Contractions of Lie algebras and separations of variables. *J. Phys. A*, 29(18):5940–5962, 1996.
79. S. Lafortune and P. Winternitz. Superposition formulas for pseudounitary Riccati equations. *J. Math. Phys.*, 37:1539–1550, 1996.
80. A. M. Grundland, P. Winternitz, and W. J. Zakrzewski. On the solution of the  $CP^1$  model in  $(2 + 1)$  dimensions. *J. Math. Phys.*, 37:1501–1520, 1996.
81. M. A. del Olmo, M. A. Rodriguez, and P. Winternitz. The conformal group and integrable systems on a Lorentzian hyperboloid. *Fortschr. der Physik*, 44:90–125, 1996.
82. J. Harnad and P. Winternitz. Classical and quantum integrable systems in  $\tilde{gl}(2)^+$  and separation of variables. *Commun. Math. Phys.*, 172:263–285, 1995.
83. J. C. Ndgomo and P. Winternitz. Generalized Casimir operators of solvable Lie algebras with Abelian nilradicals. *J. Phys. A*, 27:2787–2800, 1994.

84. E. G. Kalnins and P. Winternitz. Maximal Abelian subalgebras of complex Euclidean Lie algebras. *Canad. J. Phys.*, 72:389–404, 1994.
85. D. Levi, C. R. Menyuk, and P. Winternitz. Similarity reduction and perturbation solution of the stimulated Raman scattering equations in the presence of dissipation. *Phys. Rev. A*, 49:2844–2852, 1994.
86. J. C. Ndogmo and P. Winternitz. Solvable Lie algebras with abelian nilradicals. *J. Phys. A*, 27:405–423, 1994.
87. D. Levi, L. Vinet, and P. Winternitz. Symmetries of a nonrelativistic Chern–Simons systems. *Ann. of Phys.*, 229:101–117, 1994.
88. P. LaFrance, F. Lehar, B. Loiseau, and P. Winternitz. Antinucleon-nucleon and nucleon-nucleon total cross sections and elastic scattering observables at all energies. *Acta Polytechnica*, 33(5):5–30, 1993.
89. L. Gagnon and P. Winternitz. Symmetry classes of variable coefficient nonlinear Schrödinger equations. *J. Phys. A*, 26:7061–7076, 1993.
90. G. Rideau and P. Winternitz. Representations of the quantum algebra  $su(2)_q$  on a real two dimensional sphere. *J. Math. Phys.*, 34:6030–6044, 1993.
91. M. Faucher and P. Winternitz. Symmetry analysis of the Infeld-Rowlands equation. *Phys. Rev. E*, 48:3066–3071, 1993.
92. M. A. del Olmo, M. A. Rodriguez, and P. Winternitz. Integrable systems based on  $SU(p, q)$  homogeneous manifolds. *J. Math. Phys.*, 34:5118–5139, 1993.
93. D. Levi and P. Winternitz. Symmetries and conditional symmetries of differential-difference equations. *J. Math. Phys.*, 34:3713–3730, 1993.
94. A. M. Grundland, J. Tuszynski, and P. Winternitz. Group theory and solutions of classical field theories with polynomial nonlinearities. *Foundations of Physics*, 23:633–665, 1993.
95. K. Tenenblat and P. Winternitz. On the symmetry groups of the intrinsic generalized wave and sine-Gordon equations. *J. Math. Phys.*, 34:3527–3542, 1993.
96. J. Rubin and P. Winternitz. Solvable Lie algebras with Heisenberg ideals. *J. Phys. A*, 26:1123–1138, 1993.
97. G. Rideau and P. Winternitz. Invariant nonlinear Schrödinger equations in two-dimensional space-time. *J. Math. Phys.*, 34:558–569, 1993.
98. M. Kibler, G. H. Lamot, and P. Winternitz. Classical trajectories for two ring-shaped potentials. *Int. J. Quantum Chem.*, 43:625–645, 1992.

99. L. Martina, G. Soliani, and P. Winternitz. Partially invariant solutions of a class of nonlinear Schrödinger. *J. Phys. A*, 25:4425–4435, 1992.
100. J. P. Gazeau and P. Winternitz. Symmetries of variable-coefficient Korteweg-de Vries equations. *J. Math. Phys.*, 33:4087–4102, 1992.
101. P. Lafrance, F. Lehar, B. Loiseau, and P. Winternitz. Antinucleon-nucleon scattering formalism and possible tests of CPT invariance. *Helv. Phys. Acta*, 65:611–640, 1992.
102. L. Martina and P. Winternitz. Partially invariant solutions of nonlinear Klein-Gordon and Laplace equations. *J. Math. Phys.*, 33:2718–2727, 1992.
103. V. Hussin, P. Winternitz, and H. Zassenhaus. Maximal Abelian subalgebras of pseudoorthogonal Lie algebras. *Linear Algebra Appl.*, 173:125–163, 1992.
104. S. Melkonian and P. Winternitz. Symmetry properties and solutions of nonlinear dispersive thin-film equations in three dimensions. *J. Math. Phys.*, 32:3213–3222, 1991.
105. P. Winternitz, A. M. Grundland, and J. A. Tuszynski. Nonlinear magnetization processes in the Landau-Ginzburg model of magnetic inhomogeneities for uniaxial ferromagnetics. *Phys. Rev. B*, 44:10040–10049, 1991.
106. D. Levi, C. R. Menyuk, and P. Winternitz. Exact solutions of the stimulated Raman scattering equations. *Phys. Rev. A*, 44:6057–6070, 1991.
107. E. Infeld, G. Rowlands, and P. Winternitz. Stability analysis for the quartic Landau-Ginzburg model II. *J. Phys. Cond. Matter*, 3:4187–4193, 1991.
108. B. Champagne, W. Hereman, and P. Winternitz. The computer calculation of Lie point symmetries of large systems of differential equations. *Comput. Phys. Comm.*, 66:319–340, 1991.
109. P. A. Clarkson and P. Winternitz. Nonclassical symmetry reductions for the Kadomtsev-Petviashvili equation. *Phys. D*, 49:257–272, 1991.
110. M. Couture, J. Patera, R. T. Sharp, and P. Winternitz. Graded contractions of  $sl(3, \mathbb{C})$ . *J. Math. Phys.*, 32:2310–2318, 1991.
111. C. D. Lac, J. Ball, J. Bystricky, J. Deregél, F. Lehar, A. de Lesquen, L. van Rossum, J. M. Fontaine, F. Perrot, and P. Winternitz. Direct reconstruction of pp elastic scattering amplitudes from experimental data between 0.83 and 2.7 gev. *J. Physique*, 51:2689–2716, 1990.
112. L. Gagnon and P. Winternitz. On non-Painlevé type reduction of nonlinear Schrödinger equations. *Phys. Rev. A*, 42:5029–5030, 1990.

113. G. Paquin and P. Winternitz. Group theoretical analysis of dispersive long wave equations in two space dimension. *Phys. D*, 46:122–138, 1990.
114. V. Hussin, P. Winternitz, and H. Zassenhaus. Maximal Abelian subalgebras of complex orthogonal Lie algebras. *Linear Algebra Appl.*, 141:183–220, 1990.
115. J. Beekers, L. Gagnon, V. Hussin, and P. Winternitz. Superposition formulas for nonlinear superequations. *J. Math. Phys.*, 31:2528–2534, 1990.
116. M. A. Grundland, E. Infeld, G. Rowlands, and P. Winternitz. Stability analysis for the Landau-Ginzburg phi-4 model. *J. Phys. Cond. Matter.*, 2:7143–7150, 1990.
117. J. Rubin and P. Winternitz. Point symmetries of conditionally integrable nonlinear evolution equations. *J. Math. Phys.*, 31:2085–2090, 1990.
118. M. A. del Olmo, M. A. Rodriguez, P. Winternitz, and H. Zassenhaus. Maximal Abelian subalgebras of pseudounitary Lie algebras. *Linear Algebra Appl.*, 135:79–151, 1990.
119. R. Floreanini, J. M. Lina, L. Vinet, and P. Winternitz. Symmetries of semiclassical gravity in two dimensions. *Phys. Rev. D*, 41:1862–1866, 1990.
120. G. Rideau and P. Winternitz. Nonlinear equations invariant under the Poincaré, similitude & conformal groups in two-dimensional space-time. *J. Math. Phys.*, 31:1095–1105, 1990.
121. L. Martina and P. Winternitz. Analysis and applications of the symmetry group of the multidimensional three wave resonant interaction problem. *Ann. Physics*, 196:231–277, 1989.
122. D. Levi, M. C. Nucci, C. Rogers, and P. Winternitz. Group theoretical analysis of a rotating shallow liquid in a rigid container. *J. Phys. A*, 22:4743–4767, 1989.
123. D. Levi and P. Winternitz. Nonclassical symmetry reduction: Example of the Boussinesq equation. *J. Phys. A*, 22:2915–2924, 1989.
124. C. P. Boyer and P. Winternitz. Symmetries of the self-dual Einstein equations I. The infinite dimensional symmetry group and its low dimensional subgroups. *J. Math. Phys.*, 30:1081–1094, 1989.
125. L. Gagnon, B. Grammaticos, A. Ramani, and P. Winternitz. Lie symmetries of a generalized nonlinear Schrödinger equation III. Reduction to third order ordinary differential equations. *J. Phys. A*, 22:499–509, 1989.
126. L. Gagnon and P. Winternitz. Lie symmetries of a generalized nonlinear Schrödinger equation II. Exact solutions. *J. Phys. A*, 22:469–497, 1989.

127. L. Gagnon and P. Winternitz. Exact solutions of the cubic & quintic nonlinear Schrödinger equation for a cylindrical geometry. *Phys. Rev. A*, 39:296–306, 1989.
128. D. David, D. Levi, and P. Winternitz. Solitons in shallow seas of variable depth and in marine straits. *Stud. Appl. Math.*, 80:1–23, 1989.
129. P. Winternitz, A. M. Grundland, and J. A. Tuszynski. Exact results in the three-dimensional Landau-Ginzburg model of magnetic inhomogeneities in uniaxial ferromagnets I: Continuous transitions. *J. Phys. C*, 21:4931–4953, 1988.
130. D. W. Rand, P. Winternitz, and H. Zassenhaus. On the identification of a Lie algebra given by its structure constants I. Direct decompositions, Levi decomposition and nilradicals. *Linear Algebra Appl.*, 109:197–246, 1988.
131. L. Gagnon, V. Hussin, and P. Winternitz. Nonlinear equations with superposition formulas and the exceptional group III. The superposition formulas. *J. Math. Phys.*, 29:2145–2155, 1988.
132. M. Kibler and P. Winternitz. Lie algebras under constraints and nonbijective canonical transformations. *J. Phys. A*, 21:1787–1804, 1988.
133. L. Gagnon and P. Winternitz. Lie symmetries of a generalized nonlinear Schrödinger equation I. the symmetry group and its subgroups. *J. Phys. A*, 21:1493–1511, 1988.
134. N. Kamran, M. Legare, R.G. McLenaghan, and P. Winternitz. The classification of complete sets of operators commuting with the Dirac operator in Minkowski space-time. *J. Math. Phys.*, 29(2):403–411, 1988.
135. B. Champagne and P. Winternitz. On the infinite dimensional symmetry group of the Davey-Stewartson equations. *J. Math. Phys.*, 29:1–8, 1988.
136. J. Bystricky, P. LaFrance, F. Lehar, F. Perrot, T. Siemiarz, and P. Winternitz. Energy dependence of nucleon-nucleon inelastic total cross sections. *J. Physique*, 48:1901–1924, 1987.
137. M. Kibler and P. Winternitz. Dynamical invariance algebra of the Hartmann potential. *J. Phys. A*, 20:4097–4108, 1987.
138. P. Winternitz, A. M. Grundland, and J. A. Tuszynski. Exact solutions of the multidimensional classical  $\phi^6$  field equations. *J. Math. Phys.*, 28:2194–2212, 1987.
139. D. W. Rand, P. Winternitz, and H. Zassenhaus. PASCAL programs for identification of Lie algebras II: SPLIT, a program to decompose parameter-free & parameter-dependent Lie algebras into direct sums. *Comput. Phys. Comm.*, 46:297–309, 1987.

- 140. C. Lechanoine-Leluc, F. Lehar, P. Winternitz, and J. Bystricky. Critical review of the present experimental status of neutron-proton scattering up to 1 gev. *J. Physique*, 48:985–1008, 1987.
- 141. D. David, D. Levi, and P. Winternitz. Integrable nonlinear equations for water waves in straits of varying width and depth. *Stud. Appl. Math.*, 76:133–168, 1987.
- 142. M. A. del Olmo, M. A. Rodriguez, and P. Winternitz. Superposition formulas for rectangular matrix Riccati equations. *J. Math. Phys.*, 28:530–535, 1987.
- 143. J. Beckers, V. Hussin, and P. Winternitz. Nonlinear equations with superposition formulas and the exceptional group  $G(2)$  II. Classification of the equations. *J. Math. Phys.*, 28:520–529, 1987.
- 144. D. W. Rand and P. Winternitz. ODE Painlevé a MACSYMA package for Painlevé analysis of ordinary differential equations. *Comput. Phys. Comm.*, 42:359–383, 1986.
- 145. B. Dorizzi, B. Grammaticos, A. Ramani, and P. Winternitz. Are all the equations of the Kadomtsev–Petviashvili hierarchy integrable? *J. Math. Phys.*, 27:2848–2852, 1986.
- 146. J. Bystricky, P. LaFrance, F. Lehar, F. Perrot, and P. Winternitz. Analysis of the energy dependence of proton-proton total cross-sections in terms of  $O(4)$  expansions. *Nuovo Cimento A*, 94:319–330, 1986.
- 147. J. Beckers, V. Hussin, and P. Winternitz. Nonlinear equations with superposition formulas and the exceptional group  $G(2)$  I. Complex and real forms of  $G(2)$  and their maximal subalgebras. *J. Math. Phys.*, 27:2217–2227, 1986.
- 148. D. David, N. Kamran, D. Levi, and P. Winternitz. Symmetry reduction for the Kadomtsev–Petviashvili equation using a loop algebra. *J. Math. Phys.*, 27:1225–1237, 1986.
- 149. T. C. Bountis, V. Papageorgiou, and P. Winternitz. On the integrability of systems of nonlinear ode’s with superposition principles. *J. Math. Phys.*, 27:1215–1224, 1986.
- 150. M. A. del Olmo, M. A. Rodriguez, and P. Winternitz. Simple subgroups of simple Lie groups and nonlinear differential equations with superposition principles. *J. Math. Phys.*, 27:14–23, 1986.
- 151. B. Dorizzi, B. Grammaticos, A. Ramani, and P. Winternitz. Integrable Hamiltonian systems with velocity dependent potentials. *J. Math. Phys.*, 26:3070–3079, 1985.

152. J. Bystricky, P. LaFrance, F. Lehar, F. Perrot, and P. Winternitz. Description of the energy dependence of proton-proton partial wave amplitudes by means of  $O(4)$  expansions. *Phys. Rev. D*, 32:575–585, 1985.
153. L. Gagnon, J. Harnad, J. Hurtubise, and P. Winternitz. Abelian integrals and the reduction method for an integrable Hamiltonian system. *J. Math. Phys.*, 26:1605–1612, 1985.
154. M. Sorine and P. Winternitz. Superposition laws for nonlinear equations arising in optimal control theory. *IEEE Transactions*, AC-30:266–272, 1985.
155. C. P. Boyer, E. G. Kalnins, and P. Winternitz. Separation of variables for the Hamilton Jacobi equation on complex projective spaces. *SIAM J. Math. Anal.*, 16:93–109, 1985.
156. S. Shnider and P. Winternitz. Classification of systems of nonlinear ordinary differential equations with superposition principles. *J. Math. Phys.*, 25:3155–3165, 1984.
157. D. W. Rand and P. Winternitz. Nonlinear superposition principles: A new numerical method for solving matrix Riccati equations. *Comput. Phys. Comm.*, 33:305–328, 1984.
158. J. Bystricky, J. Deregél, F. Lehar, J. M. Fontaine, F. Perrot, C. Lechanoine-Leluc, W. R. Leo, Y. Onel, C. R. Newsom, J. Yonnet, A. Penzo, and P. Winternitz. Structures in proton-proton scattering at intermediate energies. *Nuovo Cimento A*, 82:385–402, 1984.
159. P. Winternitz. Comments on superposition rules for nonlinear coupled first order differential equations. *J. Math. Phys.*, 25:2149–2150, 1984.
160. J. Bystricky, P. Winternitz, and F. Lehar. On tests of time reversal invariance in nucleon nucleon scattering. *J. Physique*, 45:207–224, 1984.
161. A. M. Grundland, J. Harnad, and P. Winternitz. Symmetry reduction for nonlinear relativistically invariant equations. *J. Math. Phys.*, 25:791–806, 1984.
162. C. P. Boyer, E. G. Kalnins, and P. Winternitz. Completely integrable relativistic Hamiltonian systems and separation of variables in Hermitian hyperbolic spaces. *J. Math. Phys.*, 24:2022–2034, 1983.
163. J. Patera, P. Winternitz, and H. Zassenhaus. Maximal Abelian subalgebras of real and complex symplectic Lie algebras. *J. Math. Phys.*, 24:1973–1985, 1983.
164. D. Z. Djokovic, J. Patera, P. Winternitz, and H. Zassenhaus. Normal forms of elements of classical real and complex Lie and Jordan algebras. *J. Math. Phys.*, 24:1363–1374, 1983.

165. J. Harnad, P. Winternitz, and R. L. Anderson. Superposition principles for matrix Riccati equations. *J. Math. Phys.*, 24:1062–1072, 1983.
166. P. LaFrance and P. Winternitz. Nonlinear relations between observables in the scattering of spinor particles and the direct reconstruction of the scattering matrix. *Phys. Rev. D*, 27:112–129, 1983.
167. P. Winternitz. Nonlinear action of lie groups and superposition principles for nonlinear differential equations. *Phys. A*, 114:105–113, 1982.
168. A. M. Grundland, J. Harnad, and P. Winternitz. Solutions of the multidimensional sine Gordon equation obtained by symmetry reduction. *Kinam*, 4:333–344, 1982.
169. M. Daumens, E. Saintout, and P. Winternitz. Two variable expansions for nucleon-nucleon scattering. *Phys. Rev. D*, 26:1629–1634, 1982.
170. R. L. Anderson, J. Harnad, and P. Winternitz. Systems of ordinary differential equations with nonlinear superposition principles. *Phys. D*, 4:164–182, 1982.
171. J. Harnad and P. Winternitz. Pseudopotentials and Lie symmetries for the generalized Schrödinger equations. *J. Math. Phys.*, 23:517–525, 1982.
172. W. Miller, Jr., J. Patera, and P. Winternitz. Subgroups of Lie groups and separation of variables. *J. Math. Phys.*, 22:251–260, 1981.
173. P. LaFrance, C. Lechanoine, F. Lehar, F. Perrot, L. Vinet, and P. Winternitz. Test of isospin invariance in neutron proton scattering. *Nuovo Cimento A*, 64:179–200, 1981.
174. J. Patera, P. Winternitz, and H. Zassenhaus. On the maximal abelian subgroups of the linear classical algebraic groups. *Math. Rep. Acad. Sci. (Canada)*, 2:231–236, 1980.
175. J. Patera, P. Winternitz, and H. Zassenhaus. On the maximal Abelian subgroups of the quadratic classical algebraic groups. *Math. Rep. Acad. Sci. (Canada)*, 2:237–242, 1980.
176. P. LaFrance and P. Winternitz. Scattering formalism for nonidentical spinor particles. *J. Phys.*, 41:1391–1417, 1980.
177. M. Moshinsky and P. Winternitz. Quadratic Hamiltonians in phase space and their eigenstates. *J. Math. Phys.*, 21:1667–1682, 1980.
178. C. Lechanoine, F. Lehar, F. Perrot, and P. Winternitz. Polarization phenomena in nucleon nucleon forward scattering. *Nuovo Cimento A*, 56:201–228, 1980.

179. M. Daumens and P. Winternitz. Discrete two variable expansions of scattering amplitudes for particles with spin. *Phys. Rev. D*, 21:1919–1927, 1980.
180. M. Daumens, M. Perroud, and P. Winternitz. Relativistic energy dependent partial wave analysis for particles with spin. *Phys. Rev. D*, 19:3413–3425, 1979.
181. E. Chacon, M. Moshinsky, and P. Winternitz. Irreducible decomposition of direct products of  $q$  arbitrary representations of the symplectic group  $Sp(2n)$  and its relation with the orthogonal group  $O(q)$ . *Kimam*, 1:259–293, 1979.
182. J. Patera, R. T. Sharp, and P. Winternitz. Polynomial irreducible tensors for point groups. *J. Math. Phys.*, 19:2362–2375, 1978.
183. J. Beckers, J. Harnad, M. Perroud, and P. Winternitz. Tensor fields invariant under subgroups of the conformal group of space-time. *J. Math. Phys.*, 19:2126–2153, 1978.
184. G. Burdet, J. Patera, M. Perrin, and P. Winternitz. The optical group and its subgroups. *J. Math. Phys.*, 19:1758–1780, 1978.
185. J. Bystricky, F. Lehar, and P. Winternitz. Formalism of nucleon-nucleon elastic scattering experiments. *J. Physique*, 39:1–32, 1978.
186. G. Burdet, J. Patera, M. Perrin, and P. Winternitz. Sous-algèbres de Lie de l’algèbre de Schrödinger. *Ann. Sci. Math. Québec*, 2:81–108, 1978.
187. J. Patera, R. T. Sharp, P. Winternitz, and H. Zassenhaus. Continuous subgroups of the fundamental groups of physics III. the de Sitter groups. *J. Math. Phys.*, 18:2259–2288, 1977.
188. J. Patera and P. Winternitz. Subalgebras of real three and four dimensional Lie algebras. *J. Math. Phys.*, 18:1449–1455, 1977.
189. J. Beckers, J. Patera, M. Perroud, and P. Winternitz. Subgroups of the Euclidean group and symmetry breaking in nonrelativistic quantum mechanics. *J. Math. Phys.*, 18:72–83, 1977.
190. J. Patera and P. Winternitz. On bases for irreducible representations of  $O(3)$  suitable for systems with an arbitrary finite symmetry group. *J. Chem. Phys.*, 65:2725–2731, 1976.
191. J. Patera, R. T. Sharp, and P. Winternitz. Higher indices of group representations. *J. Math. Phys.*, 17:1972–1979, 1976.
192. C. P. Boyer, R. T. Sharp, and P. Winternitz. Symmetry breaking interactions for the time dependent Schrödinger equation. *J. Math. Phys.*, 17:1439–1451, 1976.

193. J. Patera, R. T. Sharp, P. Winternitz, and H. Zassenhaus. Invariants of real low dimension Lie algebras. *J. Math. Phys.*, 17:986–994, 1976.
194. J. Patera, R. T. Sharp, P. Winternitz, and H. Zassenhaus. Subgroups of the Poincaré group and their invariants. *J. Math. Phys.*, 17:977–985, 1976.
195. J. Patera, R. T. Sharp, P. Winternitz, and H. Zassenhaus. Subgroups of the similitude group of three-dimensional Minkowski space. *Canad. J. Phys.*, 54:950–961, 1976.
196. E. Kalnins, W. Miller, Jr., and P. Winternitz. The group  $O(4)$ , separation of variables and the hydrogen atom. *SIAM J. Appl. Math.*, 30:630–664, 1976.
197. J. Patera, P. Winternitz, and H. Zassenhaus. Quantum numbers for particles in de Sitter space. *J. Math. Phys.*, 17:717–728, 1976.
198. R. Brunet, L. Gauthier, and P. Winternitz. Possible ambiguities in pion nucleon phase shift analysis. *Phys. Rev. D*, 13:1390–1404, 1976.
199. J. Bystricky, F. Lehar, J. Patera, and P. Winternitz. Discrete two-variable expansions of physical scattering amplitudes. *Phys. Rev. D*, 13:1276–1283, 1976.
200. M. Moshinsky, J. Patera, R. T. Sharp, and P. Winternitz. Everything you always wanted to know about  $SU(3)$  to  $O(3)$ . *Ann. Physics*, 95:139–169, 1975.
201. J. Patera, P. Winternitz, and H. Zassenhaus. Continuous subgroups of the fundamental groups of physics II. The similitude group. *J. Math. Phys.*, 16:1615–1624, 1975.
202. J. Patera, P. Winternitz, and H. Zassenhaus. Continuous subgroups of the fundamental groups of physics I. General method and the Poincaré group. *J. Math. Phys.*, 16:1597–1614, 1975.
203. M. Moshinsky, J. Patera, and P. Winternitz. Canonical transformations and accidental degeneracy III. A unified approach to the problem. *J. Math. Phys.*, 16:82–92, 1975.
204. J. Patera, P. Winternitz, and H. Zassenhaus. The maximal solvable subgroups of  $SO(p, q)$  groups. *J. Math. Phys.*, 15:1932–1938, 1974.
205. B. R. Judd, W. Miller, Jr., J. Patera, and P. Winternitz. Complete sets of commuting operators and  $O(3)$  scalars in the enveloping algebra of  $SU(3)$ . *J. Math. Phys.*, 15:1787–1799, 1974.
206. M. Moshinsky, J. Patera, R. T. Sharp, and P. Winternitz. Isotopic spin conservation and charge distribution in multipion production. *Phys. Rev. D*, 10:1587–1594, 1974.

- 207. J. Patera, P. Winternitz, and H. Zassenhaus. The maximal solvable subgroups of the  $SU(p, q)$  groups and all subgroups of  $SU(2, 1)$ . *J. Math. Phys.*, 15:1378–1393, 1974.
- 208. J. Patera, R. T. Sharp, and P. Winternitz. Nagel-Moshinsky operators for discrete unitary representations of  $U(p, q)$ . *Rev. Mex. Fis.*, 23:81–98, 1974.
- 209. J. Patera and P. Winternitz. Invariant trilinear couplings involving both  $SU(2)$  and  $SU(1, 1)$  states. *J. Math. Phys.*, 14:1977–1983, 1973.
- 210. E. Kalnins, J. Patera, R. T. Sharp, and P. Winternitz. Potential scattering and Galilei invariant expansions of scattering amplitudes. *Phys. Rev. D*, 8:3527–3538, 1973.
- 211. E. Kalnins, J. Patera, R. T. Sharp, and P. Winternitz. Two variable galilei group expansions of nonrelativistic scattering amplitudes. *Phys. Rev. D*, 8:2552–2572, 1973.
- 212. J. Patera and P. Winternitz. A new basis for the representations of the rotation group Lamé and Heun polynomials. *J. Math. Phys.*, 14:1130–1139, 1973.
- 213. R. Willey, P. Winternitz, and Tsu Yao. Kinematics of  $K_{l3}$  decay amplitudes and relativistic equations for spin-zero particles. *Phys. Rev. D*, 7:3540–3543, 1973.
- 214. H. R. Hicks, C. Shukre, and P. Winternitz. Two variable expansions and antiproton-neutron to three pion annihilations at rest. *Phys. Rev. D*, 7:2659–2667, 1973.
- 215. H. Hicks and P. Winternitz. Harmonic analysis on the Dalitz plot and eta to three pion decays. *Phys. Rev. D*, 7:153–160, 1973.
- 216. C. Shukre and P. Winternitz. Two-variable expansions for three-body decays involving particles with arbitrary spins. *Phys. Rev. D*, 6:3607–3617, 1972.
- 217. C. Shukre and P. Winternitz. Two-variable Lorentz group expansions of physical scattering amplitudes with arbitrary spins. *Phys. Rev. D*, 6:3592–3600, 1972.
- 218. H. Hicks and P. Winternitz. Two-variable expansions and the kaon to three pion decays. *Phys. Rev. D*, 5:2877–2889, 1972.
- 219. H. Hicks and P. Winternitz. Relativistic two-variable expansions for three-body decay amplitudes. *Phys. Rev. D*, 4:2339–2351, 1971.
- 220. J. Belinfante and P. Winternitz. One-parameter subgroups of unitary groups with indefinite metric and in particular of the conformal group. *J. Math. Phys.*, 12:1041–1054, 1971.

- 221. N. Macfadyen and P. Winternitz. Crossing symmetric expansions of scattering amplitudes, threshold behavior and asymptotics. *Phys. Rev. D*, 3:1874–1879, 1971.
- 222. N. Macfadyen and P. Winternitz. Crossing symmetric expansions of physical scattering amplitudes the  $O(2, 1)$  group and Lamé functions. *J. Math. Phys.*, 12:281–293, 1971.
- 223. P. Pajas and P. Winternitz. Relativistic partial wave analysis in two variables and the crossing transformation. *Phys. Rev. D*, 1:1105–1114, 1970.
- 224. P. Pajas and P. Winternitz. Representations of the Lorentz group. new integral relations between Legendre functions. *J. Math. Phys.*, 11:1505–1510, 1970.
- 225. R. L. Anderson, R. Raczka, M. Rashid, and P. Winternitz. Recursion and symmetry relations for the Clebsch-gordon coefficients of the homogeneous Lorentz group. *J. Math. Phys.*, 11:1059–1068, 1970.
- 226. R. L. Anderson, R. Raczka, M. Rashid, and P. Winternitz. Clebsch-Gordon coefficients for the coupling of  $Sl(2, \mathbb{C})$  principal series representations. *J. Math. Phys.*, 11:1050–1058, 1970.
- 227. P. Winternitz. Two-dimensional expansions of relativistic amplitudes in the Mandelstam triangle and crossing symmetric reactions. *Czech. J. Phys. B*, 19:1589–1601, 1969.
- 228. W. Montgomery, L. O’Raifeartaigh, and P. Winternitz. Two-variable expansions of relativistic amplitudes and the subgroups of the  $SU(2, 1)$  group. *Nuclear Physics B*, 11:39–54, 1969.
- 229. P. Winternitz, J. Smorodinsky, and M. Sheftel. Two dimensional expansions of relativistic amplitudes, Regge trajectories and daughter poles. *Yadernaya Fizika*, 8:833–846, 1968. [English Transl. in *Sov. J. Nucl. Phys.* 8 (1969), 485–491].
- 230. P. Winternitz, J. Smorodinsky, and M. Sheftel. Poincaré and Lorentz invariant expansions of relativistic amplitudes. *Yadernaya Fizika*, 7:1325–1338, 1968. [English Transl. in *Sov. J. Nucl. Phys.* 7 (1968), 785–792].
- 231. P. Winternitz, I. Lukac, and J. Smorodinsky. Quantum numbers in the little groups of the Poincaré group. *Yadernaya Fizika*, 7:192–201, 1968. [English Transl. in *Sov. J. Nucl. Phys.* 7 (1968), 139–145].
- 232. Z. Janout, Y. Kazarinov, F. Lehar, and P. Winternitz. The nucleon-nucleon triple scattering parameters for recoil particles. *Czech. J. Phys. B*, 18:970–976, 1968.

233. Z. Janout, Y. Kazarinov, F. Lehar, and P. Winternitz. Simultaneous phase shift analysis of 210 mev nucleon-nucleon scattering. *Nuclear Physics B*, 4:527–533, 1968.
234. Z. Janout, F. Lehar, and P. Winternitz. Polarization correlation in the scattering of polarized nucleons. *Czech. J. Phys. B*, 18:8–17, 1968.
235. P. Winternitz and A. Zubarev. Vector meson production and the  $(SU(3) \times SU(3))$  collinear symmetry. *Czech. J. Phys. B*, 18:1–7, 1968.
236. A. Makarov, J. Smorodinsky, Kh. Valiev, and P. Winternitz. A systematic search for non-relativistic systems with dynamical symmetries. *Nuovo Cimento A*, 52:1061–1084, 1967.
237. F. Lehar and P. Winternitz. Application of a polarized proton target for the study of low energy nucleon-nucleon interactions. *Czech. J. Phys. A*, 17:158–211, 1967.
238. F. Lehar and P. Winternitz. Polarized proton targets and low energy nucleon-nucleon experiments. *Fortschritte der Physik*, 15:495–536, 1967.
239. P. Winternitz, M. Kasymzhanov, and A. Makarov. Baryon-baryon interactions and collinear symmetries. *Yadernaya Fizika*, 5:1306–1311, 1967. [English Transl. in Sov. J. Nucl. Phys. 5 (1967) 933].
240. P. Winternitz, F. Lehar, and Z. Janout. Spin correlation tensor in the scattering of polarized nucleons by a polarized proton target. *Yadernaya Fizika*, 5:201–203, 1967. [English Transl. in Sov. J. Nucl. Phys. 5 (1967), 141–142].
241. P. Winternitz, A. Zubarev, and A. Makarov. Electromagnetic current and form factors for the meson 35-plet in the  $Sl(6, \mathbb{C})$  symmetry. *Yadernaya Fizika*, 4:1223–1226, 1966. [English Transl. in Sov. J. Nucl. Phys. 4 (1967), 879–881].
242. P. Winternitz and A. Makarov. Two-meson annihilation of baryons in broken  $Sl(6, \mathbb{C})$  symmetry. *Yadernaya Fizika*, 4:868–871, 1966. [English Transl. in Sov. J. Nucl. Phys. 4 (1967), 619].
243. P. Winternitz, J. Smorodinsky, M. Uhlir, and I. Fris. Symmetry groups in classical and quantum mechanics. *Yadernaya Fizika*, 4:625–635, 1966. [English Transl. in Sov. J. Nucl. Phys. 4 (1967), 444–450].
244. S. Bilenkaya, P. Winternitz, F. Lehar, and Z. Janout. Polarization tensor in the scattering of polarized nucleons on a polarized proton target. *Yadernaya Fizika*, 4:132–138, 1966. [English Transl. in Sov. J. Nucl. Phys. 4 (1967), 95].
245. A. Makarov, V. H. Nguyen, and P. Winternitz. Antiproton annihilation into two mesons and higher symmetries. *Fortschritte der Physik*, 14:771–801, 1966.

246. P. Winternitz, A. Makarov, V. Matveev, V. H. Nguyen, J. Smorodinsky, L. Tkachev, and M. Uhlir. Algebra of currents and form factors. *Yadernaya Fizika*, 3:918–923, 1966. [English Transl. in Sov. J. Nucl. Phys. 3 (1966), 672].
247. P. Winternitz, A. Makarov, V. H. Nguyen, L. Tkachev, and M. Uhlir. Meson current in broken  $U(12)$  symmetry and colliding beam experiments. *Yadernaya Fizika*, 3:722–725, 1966. [English Transl. in Sov. J. Nucl. Phys. 3 (1966), 530].
248. P. Winternitz, A. Makarov, V. H. Nguyen, L. Tkachev, and M. Uhlir. Annihilation of baryons in broken  $U(12)$  symmetry. *Yadernaya Fizika*, 3:541–544, 1966. [English Transl. in Sov. J. Nucl. Phys. 3 (1966), 392].
249. P. Winternitz, A. Makarov, V. H. Nguyen, L. Tkachev, and M. Uhlir. On the structure of vector and axial currents in broken  $U(12)$  theory. *DAN (USSR)*, 166:1323–1325, 1966. [English Transl. in Sov. Phys. Doklady 11 (1966), 148–150].
250. P. Winternitz and I. Fris. Invariant expansions of relativistic amplitudes and the subgroups of the proper Lorentz group. *Yadernaya Fizika*, 1:889–901, 1965. [English Transl. in Sov. J. Nucl. Phys. 1 (1965), 636–643].
251. P. Winternitz, J. Smorodinsky, and M. Uhlir. On four-dimensional angular momentum theory. *Yadernaya Fizika*, 1:163–172, 1965. [English Transl. in Sov. J. Nucl. Phys. 1 (1965), 113].
252. P. Winternitz. Optical theorem for the scattering of particles with arbitrary spins. *Zh. Eksp. Teor. Fiz.*, 46:2108–2111, 1964. [English Transl. in Sov. Phys. JETP 19 (1964), 1422–1424].
253. F. Janouch and P. Winternitz. Angular distribution of gamma-quanta in the capture of polarized mu-mesons by atomic nuclei. *Czech. J. Phys. B*, 12:331–337, 1962.
254. P. Winternitz. Elastic scattering of nucleons on targets with spin 1. *Czech. J. Phys. B*, 11:482–489, 1961.
255. P. Winternitz. Scattering matrix for the scattering of nucleons upon targets with spin 1. *Zh. Eksp. Teor. Fiz.*, 39:147, 1960. [English Transl. in Sov. Phys. JETP 12 (1961), 1025].