

## Published Conference Contributions

1. M. A. Rodriguez, P. Tempesta, and P. Winternitz. Symmetry reduction and superintegrable Hamiltonian systems. In R. Campoamor-Stursberg et al., editor, *J.Phys. Conf. Series*, volume 175, page 012013 (8pp), Universidad Complutense, Madrid, Spain, 2009. IOP, Bristol, U.K.
2. P. Winternitz and I. Yurdusen. Superintegrable systems with spin in two and three dimensional Euclidean spaces. In G. Gaeta, R. Vitolo, and R. Walcher, editors, *Symmetry and Perturbation Theory*, pages 215–222, Otranto, Italy, 2007. World Scientific, Singapore, 2008.
3. P. Winternitz. Symmetries of linear and nonlinear difference systems. In G. S. Pogosyan, L.G. Vicent, and K.B Wolf, editors, *Proceedings of the 25 ICGTMP*, pages 121–129, Cocoyoc, Mexico, 2005. IOP, Bristol, U.K.
4. J. Berube and P. Winternitz. Integrability and superintegrability without separability. In P. Tempesta, P. Winternitz, Harnad J., W. Jr Miller, G. Pogosyan, and M. Rodriguez, editors, *Superintegrability in Classical and Quantum Systems*, volume 37 of *CRM Proceedings and Lecture Notes*, pages 269–281, Montreal, QC, Canada, 2004. AMS, Providence, R.I.
5. P. Winternitz. Subalgebras of Lie algebras. Example of  $\mathfrak{sl}(3, \mathbb{R})$ . In P. Winternitz, J. Harnad, C.S. Lam, and J. Patera, editors, *Symmetry in Physics. In memory of Robert T. Sharp*, volume 34 of *CRM Proceedings and Lecture Notes*, pages 215–227, Montreal, QC, Canada, 2004. AMS, Providence, R.I.
6. A.A.Izmestev, G.S. Pogosyan, A.N.Sissakian, and P.Winternitz. Contraction and interbases expansion on n-sphere. In *Proceedings of International Symposium on Quantum Theory and Symmetries*, Cracow, Poland, 2001. World Scientific. To be published.
7. J. Daboul and P. Winternitz. A superintegrable time-dependent system with Kac-Moody symmetry. In *Proceedings of the 23. International Colloquium on Group Theoretical Methods in Physics*, Dubna ,Russia, 2000. Phys.Atom.Nuclei, 65, (6), 1000-1007, 2002.
8. M.B. Sheftel, P. Tempesta, and P. Winternitz. Lie symmetries and superintegrability in quantum mechanics. In *Proceedings of the 23. International Conference on Group Theoretical Methods in Physics*, Dubna, Russia, 2000. Phys.Atom.Nuclei, 65, (6), 1144-1148,2002.
9. P. Winternitz, K.B. Wolf, G.S. Pogosyan, and A.N. Sissakian. Graf's addition theorem obtained from  $SO(3)$  contraction. In *Proceedings of Conference on Integrable Systems*, Protvino, Russia, 2001. Theor.Math.Phys. 129, (2), 227-229, 2001.

10. M. Havlicek, S. Posta, and P. Winternitz. Superposition formulas based on nonprimitive group actions. In A. Coley, D. Levi, R. Milson, C. Rogers, and P. Winternitz, editors, *Backlund and Darboux transformations. The Geometry of Solitons*, volume 29 of *CRM Proceedings and Lecture Notes*, pages 225–231, Halifax, N.S., 1999. AMS, Providence, R.I., 2001.
11. R. Hernandez-Heredero, D. Levi, M.A. Rodriguez, and P. Winternitz. Symmetries of differential difference equations and Lie algebra contractions. In A. Coley, D. Levi, R. Milson, C. Rogers, and P. Winternitz, editors, *Backlund and Darboux transformations. The Geometry of Solitons*, volume 29 of *CRM Proceedings and Lecture Notes*, pages 233–243, Halifax, N.S., 1999. AMS, Providence, R.I., 2001.
12. Z. Thomova and P. Winternitz. Separation of variables and Darboux transformations. In A. Coley, D. Levi, R. Milson, C. Rogers, and P. Winternitz, editors, *Backlund and Darboux transformations. The Geometry of Solitons*, volume 29 of *CRM Proceedings and Lecture Notes*, pages 419–427, Halifax, N.S., 1999. AMS, Providence, R.I., 2001.
13. P. Winternitz. Backlund transformations as nonlinear ordinary differential, or difference equations with superposition formulas. In A.A. Coley, D. Levi, R. Milson, C. Rogers, and P. Winternitz, editors, *Backlund and Darboux transformations: the Geometry of Solitons*, volume 29 of *CRM Proceedings and Lecture Notes*, pages 429–436, Halifax, N.S., 1999. AMS, Providence, R.I., 2001.
14. V. Dorodnitsyn, R. Kozlov, and P. Winternitz. Symmetry classification of second order difference equations. In M. Boiti and F. Pempinelli, editors, *Nonlinearity, integrability and all that*, pages 250–257, Gallipoli, Italy, 1999. World Scientific, Singapore, 2000.
15. P. Winternitz. Lie groups and difference equations. In *Proceedings of the 22nd International Colloquium on Group Theoretical Methods in Physics*, pages 113–124, Hobart, Australia, 1998. International Press, Boston, 1999.
16. P. Winternitz. Laudatio on the occasion of the award of the Wigner medal to M. Moshinsky. In *Proceedings of the 22nd International Colloquium on Group Theoretical Methods in Physics*, pages xvi–xxi, Hobart, Australia, 1998. International Press, Boston, 1999.
17. D. Gomez-Ullate, S. Lafortune, and Winternitz P. Symmetry classification of systems of differential- difference equations. In D. Levi and O. Ragnisco, editors, *SIDE 3 Proceeding, Symmetry and Integrability of difference equations*, CRM Proceedings and Lecture Notes, pages 167–172, Sabaudia, Italy, 1998. AMS, Providence, R.I., 2000.
18. R. Hernandez Heredero, D. Levi, and Winternitz P. Symmetry preserving discretization of the Burgers equation. In D. Levi and O. Ragnisco, editors, *SIDE 3 Proceedings, Symmetry and Integrability of Difference*

- equations*, CRM Proceedings and Lecture Notes, pages 197–208, Sabaudia, Italy, 1998. AMS, Providence, R.I. ,2000.
19. Y. Nutku, M.B. Sheftel, A.A. Malykh, and P. Winternitz. Invariant solutions to complex Monge-Ampere equation and gravitational instantons. In *Proceedings of 8th International Conference on Symmetry Methods in Physics*, Dubna, Russia, 1997. Phys.Atom.Nucl.,61,1874-1877,1998.
  20. P. Winternitz. Lie group contractions and separation of variables. In *Proceedings of the 8th International Conference on Symmetry Methods in Physics*, Dubna, Russia, 1997. Phys.Atom.Nucl. 61, 1705-1712, 1998.
  21. P. Winternitz. Families of ordinary differential equations with the Painlevé property. In *Workshop on Nonlinear Special Functions: The Painlevé Transcendents*, CRM Series in Theoretical Physics. Springer-Verlag, 1996. to appear.
  22. P. Winternitz. Symmetry analysis of difference equations. In *Physical Applications and Mathematical Aspects of Geometry, Groups, and Algebras*, Proceedings of 21. International Colloquium on Group Theoretical Methods in Physics, pages 1005–1010, Goslar, Germany, 1996. World Scientific, Singapore, 1997.
  23. P. Winternitz. Nonlinear difference equations with superposition formulas. In *2. International Conference on Symmetries and Integrability of Difference Equations*, pages 275–283, Canterbury, UK, 1996. Cambridge University Press, 1999.
  24. A. A. Izmet'sev, G. S. Pogosyan, A. N Sissakian, and P. Winternitz. Contractions of Lie algebras and separation of variables. Two-dimensional hyperboloid. In *Proceedings of 2. International Workshop on Classical and Quantum Integrable Systems*, Dubna, Russia, 1996. Intl. J. Mod. Phys., A12, 1, 53-61, 1997.
  25. P. Winternitz. Successive refinements of gradings and graded contractions of  $sl(3, c)$ . In *Proceedings of 2. International Workshop on Classical and Quantum Integrable Systems*, Dubna, Russia, 1996. Intl. J. Mod. Phys., A12, 1, 109-115, 1997.
  26. P. Winternitz. Symmetry analysis for discrete equations. In *Proceedings of the Meeting of the Canada-Mexico-USA Physical Societies*, Laval University, Quebec, 1995. to appear.
  27. D. Levi, L. Vinet, and P. Winternitz. Symmetries of discrete physical systems. In *Proceedings of 4th Wigner Symposium*, pages 383–391, Guadalajara, Mexico, 1995. World Scientific, Singapore, 1996.
  28. D. Levi and P. Winternitz. Symmetry analysis of discrete dynamical systems. In *Nonlinear Physics, Theory and Experiment*, pages 199–216, Gallipoli, Italy, 1995. World Scientific, Singapore, 1996.

29. P. Winternitz and D. Levi. Continuous symmetries of differential - difference equations. In J. Bertrand, M. Flato, J.P. Gazeau, M. Irac-Astaud, and D. Sternheimer, editors, *Proceedings of Colloquium Dedicated to G. Rideau*, volume 18 of *Mathematical Physics Studies*, pages 271–281, Paris, France, 1995. Kluwer, Dordrecht, 1995.
30. D. Levi and P. Winternitz. Lie point symmetries of differential -difference equations. In *Symmetries and Integrability of Difference Equations*, pages 199–208, Esterel, Quebec, 1994. AMS, Providence, R.I., 1996.
31. P. Winternitz and G. Rideau. Spherical functions for quantum algebra  $su(2)_q$ . In *International Workshop on Symmetry Methods in Physics*, volume 2, pages 584–591, Dubna, Russia, 1993. JINR Publishing Department, Dubna, 1994.
32. P. Winternitz, M. A. del Olmo, and M. A. Rodriguez. Maximal Abelian subgroups of  $su(p,q)$  and integrable Hamiltonian systems. In *Proc. NATO ARW on Noncompact Groups and their Physical Applications*, pages 181–198, San Antonio, Texas, 1993. Kluwer, Dordrecht, 1994.
33. D. Levi, L. Vinet, and P. Winternitz. Symmetries of a classical Chern-Simons theory. In *Proc. CAP-NSERC Workshop on Quantum Groups, Statistical Systems and Integrable Models*, pages 148–158, Kingston, 1992. World Scientific, Singapore, 1993.
34. D. Levi and P. Winternitz. Symmetries of differential equations on a lattice. An example: The toda lattice. In *Proc. of Conf. on Modern Group Analysis. Advanced Analytical and Computational Methods in Mathematics in Physics*, pages 265–272, Catania, Italy, 1992. Kluwer, Dordrecht, 1993.
35. D. Levi and P. Winternitz. Symmetries and conditional symmetries of differential difference equations. In *Proc. NATO ARW, Applic. of Analytic and Geometric Methods to Nonlin. Diff. Equations*, pages 405–419, Exeter, 1992. Kluwer, Dordrecht, 1993.
36. M. A. del Olmo, M. A. Rodriguez, and P. Winternitz. Completely integrable Hamiltonian systems on  $O(p, q)$  hyperboloids. In *Proc. 19th Intern. Coll. Group Theor. Math. Phys.*, pages 426–429, Salamanca, 1992. Anales de Fisica Monografias, 1992.
37. E. G. Kalnins and P. Winternitz. Maximal Abelian subalgebras of complex Euclidian Lie algebras. In *Proc. of 19th Internat. Coll. Group Theor. Math. Physics*, pages 479–482, Salamanca, 1992. Anales de Fisica Monografias, 1992.
38. P. Winternitz. Lie point symmetries and exact solutions of nonlinear differential equations. In *Proc. 2nd Internat. Wigner Symposium*, pages 158–166, Gosslar, 1991. World Scientific, Singapore, 1993.

39. P. Winternitz. Exact solutions of classical field equations with polynomial nonlinearities and their stability. In *Proc. of 7th workshop on Nonlinear Evolution Equations and Dynamical Systems*, pages 444–452, Gallipoli, 1991. World Scientific, Singapore, 1992.
40. P. Winternitz. Symmetries and nonlinear phenomena. In K.B.Wolf A.Frank, T.H.Seligman, editor, *Group Theory in Physics, Proc. Symp. on Symmetries in Physics in honor of M. Moshinsky*, pages 87–96, Co-coyoc, Mexico, 1991. AIP, New York, 1992.
41. P. Winternitz. Physical applications of Painlevé type equations quadratic in the highest derivative. In *Proc. Workshop on Painlevé Transcendents, their Asymptotics and Physical Applications*, pages 272–276, Sainte Adele, Quebec, 1990. Plenum, New York, 1992.
42. P. Winternitz. Similarity solutions of equations of nonlinear optics. In *Proc. Meeting on Solitons and Chaos*, pages 99–107, Brussels, 1990. Springer, Berlin, 1991.
43. M. A. del Olmo, M. A. Rodriguez, and P. Winternitz. Hamilton-Jacobi equations in  $SU(2, 2)$  homogeneous spaces. In *Proc. 18th Internat. Coll. Group Theor. Meth. in Phys.*, volume 382 of *Lecture Notes in Physics*, pages 281–284, Moscow, 1990. Springer, Berlin, 1991.
44. J. F. Cariñena, M. A. del Olmo, and P. Winternitz. Cohomology and symmetry of differential equations. In *Proc. 18th Internat. Coll. Group Theor. Meth. in Phys.*, volume 382 of *Lecture Notes in Physics*, pages 272–276, Moscow, 1990. Springer, Berlin, 1991.
45. P. Winternitz. Conditional symmetries and conditional integrability for nonlinear systems. In *Proc. 18th Internat. Coll. Group Theor. Meth. in Phys.*, volume 382 of *Lecture Notes in Physics*, pages 263–271, Moscow, 1990. Springer, Berlin, 1991.
46. A. M. Grundland, J. A. Tuszynski, and P. Winternitz. Analysis of the static spherically symmetric solutions of the phi-to-the-sixth field equations, obtained by symmetry reduction. In J.A.Tuszynski W.Rozmus, editor, *Nonlinear and Chaotic Phenomena, Proc. CAP-NSERC Summer Institute on Theor. Phys.*, pages 80–89, Edmonton, Alberta, 1990. World Scientific, Singapore, 1991.
47. P. Winternitz. Exact analytic solutions for partially integrable nonlinear physical systems. In J.A.Tuszynski W.Rozmus, editor, *Proceedings of CAP-NSERC Summer Institute on Theor. Phys., Nonlinear and Chaotic Phenomena in Plasmas, Solids and Fluids*, pages 55–71, Edmonton, Alberta, 1990. World Scientific, Singapore, 1991.
48. J. Teichmann and P. Winternitz. Three wave interactions in dissipative systems. In *Proc. 17th European Conf. on Controlled Fusion and Plasma Heating*, pages 864–867, Amsterdam, 1990.

49. J. A. Tuszynski, P. Winternitz, and A. M. Grundland. Applications of nonlinear pde's to the modelling of ferromagnetic inhomogenities. In N.Boccara R.Conte, editor, *Proc. NATO ASI, Partially Integrable Evolution Equations in Physics*, pages 593–594, Les Houches, France, 1989. Kluwer, Dordrecht, 1990.
50. A. M. Grundland, J. A. Tuszynski, and P. Winternitz. Elliptic function solutions for landau-ginsburg equation. In N.Boccara R.Conte, editor, *Proc. NATO ASI, Partially Integrable Evolution Equations in Physics*, pages 583–584, Les Houches, France, 1989. Kluwer, Dordrecht, 1990.
51. P. Winternitz. Symmetries, singularities and exact solutions for nonlinear systems. In M.Daniel M.Lakshmanan, editor, *Symmetries and Singularity Structures*, Research Reports in Physics, pages 2–11, Tiruchirapalli, India, 1989. Springer, Berlin, 1990.
52. P. Winternitz. Kac-Moody-Virasoro symmetries of integrable nonlinear evolution equations. In J.E.Marsden J.Harnad, editor, *Proceedings of the Workshop on Hamiltonian Systems, Transformation Groups and Spectral Transform Methods*, pages 87–93, Montréal, 1989. Publications CRM, 1990.
53. P. Winternitz. Symmetry groups of multidimensional integrable nonlinear systems. In D.H.Sattinger P.J.Olver, editor, *Proceedings of Workshop on Solitons in Physics, Mathematics and Nonlinear Optics*, pages 203–215, Minneapolis, 1989. Springer, New York, 1990.
54. P. Winternitz. Kac-Moody-Virasoro symmetries of integrable nonlinear partial differential equations. In D. Levi and P. Winternitz, editors, *Symmetries and Nonlinear Phenomena*, pages 358–375, Paipa, Colombia, 1988. World Scientific, Singapore, 1988.
55. V. Hussin, J. Beckers, L. Gagnon, and P. Winternitz. Nonlinear equations with superposition principles, the Lie group  $G(2)$  and its maximal subgroups. In *Proc. 17th Internat. Coll. Group Theor. Methods in Physics*, pages 492–495, Sainte-Adèle, 1988. World Scientific, Singapore, 1989.
56. A. M. Grundland, J. A. Tuszynski, and P. Winternitz. Jacobi elliptic solutions of the quintic nonlinear Klein-Gordon equations. In *Proc. 17th Internat. Coll. Group Theor. Methods in Physics*, pages 488–491, Sainte-Adèle, 1988. World Scientific, Singapore, 1989.
57. L. Gagnon and P. Winternitz. Exact solutions of the cubic nonlinear schrü $\ddot{u}$  $\frac{1}{2}$ inger equation obtained by symmetry reduction. In *Proc. 17th Internat. Coll. Group Theor. Methods in Physics*, pages 480–483, Sainte-Adèle, 1988. World Scientific, Singapore, 1989.
58. V. Hussin, P. Winternitz, and H. Zassenhaus. Maximal Abelian subalgebras of  $o(n, \mathbb{C})$ . In *Proc. 17th Internat. Coll. Group Theor. Methods in*

- Physics*, pages 413–416, Sainte-Adèle, 1988. World Scientific, Singapore, 1989.
59. M. A. del Olmo, M. A. Rodriguez, P. Winternitz, and H. Zassenhaus. Maximal Abelian subalgebras of  $su(p, q)$ . In *Proc. 17th Internat. Coll. Group Theor. Methods in Physics*, pages 401–404, Sainte-Adèle, 1988. World Scientific, Singapore, 1989.
  60. J. A. Tuszynski, A. M. Grundland, and P. Winternitz. Analysis of the Landau-Ginzburg model for magnetic inhomogeneities. In *Proc. 17th Internat. Coll. Group Theor. Methods in Physics*, pages 286–289, Sainte-Adèle, 1988. World Scientific, Singapore, 1989.
  61. M. A. del Olmo, M. A. Rodriguez, and P. Winternitz. Superposicion no lineal en ecuaciones diferenciales ordinarias. In *Ecuaciones Diferenciales y Aplicaciones*, pages 307–312, Valladolid, Spain, 1986. Secretariado de Publicaciones, Valladolid, 1987.
  62. P. Winternitz. Loop algebras as symmetry algebras of nonlinear partial differential equations integrable by inverse scattering techniques. In P.C.Sabatier, editor, *Inverse Problems: An Interdisciplinary Study*, pages 457–462, Montpellier, 1986. Academic Press, New York, 1987.
  63. A. M. Grundland, J. A. Tuszynski, and P. Winternitz. Applications of the three-dimensional phi-6 model to structural phase transitions. In *Proc. 15th Internat. Coll. on Group Theor. Methods in Physics*, pages 435–439, Philadelphia, 1986. World Scientific, Singapore, 1987.
  64. P. Winternitz. What is new in the study of differential equations by group theoretical methods. In *Proc. 15th Internat. Coll. on Group Theor. Methods in Physics*, pages 229–248, Philadelphia, 1986. World Scientific, Singapore, 1987.
  65. L. Gagnon, J. Beckers, V. Hussin, and P. Winternitz. Nonlinear differential equations with superposition laws for the  $osp(1, 2)$  superalgebra. In *Proc. 15th Internat. Coll. on Group Theor. Methods in Physics*, pages 435–439, Philadelphia, 1986. World Scientific, Singapore, 1987.
  66. D. W. Rand and P. Winternitz. Investigating the structure of a Lie algebra. In B. W. Char, editor, *Proc. Symposium on Symbolic & Algebraic Computation*, pages 39–44, Waterloo, 1986. Association for Computing Machinery, New York, 1986.
  67. M. A. del Olmo, M. A. Rodriguez and P. Winternitz. Integrability, chaos and nonlinear superposition formulas for differential matrix Riccati equations. In *Proc. Second International Conference on Quantum Chaos*, volume 263 of *Lecture Notes in Physics*, pages 372–378, Cuernavaca, 1986. Springer, Berlin, 1986.

68. P. Winternitz. Loop groups as symmetry groups of nonlinear partial differential equations. In Y. M. Cho, editor, *Proc. Fourteenth Internat. Colloquium on Group Theoretical Methods in Physics*, pages 230–233, Seoul, 1985. World Scientific, Singapore, 1986.
69. D. W. Rand and P. Winternitz. Computer-assisted classification of Lie subalgebras. In W. W. Zachary, editor, *Proc. Thirteenth Internat. Colloquium on Group Theoretical Methods in Physics*, pages 279–282, Maryland, 1984. World Scientific, Singapore, 1984.
70. L. Gagnon, J. Harnad, and P. Winternitz. Group projection method and the separation of variables for an integrable Hamiltonian system. In W. W. Zachary, editor, *Proc. Thirteenth Internat. Colloquium on Group Theoretical Methods in Physics*, pages 123–126, Maryland, 1984. World Scientific, Singapore, 1984.
71. P. Winternitz and H. Zassenhaus. The structure of maximal Abelian subalgebras of classical Lie and Jordan algebras. In W. W. Zachary, editor, *Proc. Thirteenth Internat. Colloquium on Group Theoretical Methods in Physics*, pages 115–118, Maryland, 1984. World Scientific, Singapore, 1984.
72. A. M. Grundland, J. Harnad, and P. Winternitz. Subgroups of lie groups and symmetry reduction for nonlinear partial differential equations. In G. Ghirardi, T. Weber, and G. Denardo, editors, *Proc. Twelfth Internat. Colloquium on Group Theoretical Methods in Physics*, volume 201 of *Lecture Notes in Physics*, pages 114–118, Trieste, 1983. Springer, Berlin, 1984.
73. A. M. Grundland, J. Harnad, and P. Winternitz. Symmetry reduction for nonlinear wave equations in Riemannian and pseudo-Riemannian spaces. In B. Moodie and C. Rogers, editors, *Wave Phenomena Modern Theory and Applications*, pages 373–390, Toronto, Ontario, 1983. Elsevier Sci. Publ North Holland, 1984.
74. J. Bystricky, P. LaFrance, F. Lehar, F. Perrot, and P. Winternitz. Reconstruction of proton-proton partial wave amplitudes using  $O(4)$  expansions. In *Tenth Internat. Conf. on Few Body Problems in Physics*, pages 37–38, Karlsruhe, 1984. Elsevier Sci. Publ North Holland, 1984.
75. P. Winternitz. Completely integrable Hamiltonian systems and the separation of variables. In M. Serdaroglu and E. Inonu, editors, *Proc. 11th Internat. Colloquium on Group Theoretical Methods in Physics*, volume 180 of *Lecture Notes in Physics*, pages 142–153, Istanbul, 1982. Springer, Berlin, 1983.
76. J. Harnad and P. Winternitz. Group theoretical methods and the nonlinear Schrödinger equation. In V. Lakshmikantham, editor, *Nonlinear*



- Phenomena in Math. Sciences*, pages 507–512, Arlington, Texas, 1980. Academic Press, New York, 1982.
77. R. L. Anderson, J. Harnad, and P. Winternitz. Superposition principles for nonlinear differential equations. In *Proc. NATO Advanced Study Institute on Nonlinear Phenomena in Physics & Biology*, pages 573–576, Banff, 1980. Plenum Press, New York, 1981.
  78. J. Harnad and P. Winternitz. Pseudopotentials and symmetries for generalized nonlinear Schrödinger equations. In *Proc. NATO Advanced Study Institute on Nonlinear Phenomena in Physics & Biology*, pages 57–1–572, Banff, 1980. Plenum Press, New York, 1981.
  79. J. Harnad and P. Winternitz. Backlund transformations, conservation laws and Lie symmetries for the generalized nonlinear Schrödinger equation. In *Proc. 9th Internat. Colloquium on Group Theoretical Methods in Physics*, volume 135 of *Lecture Notes in Physics*, pages 170–173, Cocoyoc, 1980. Springer, Berlin, 1980.
  80. R. L. Anderson and P. Winternitz. A nonlinear superposition principle for Riccati equations of the conformal type. In *Proc. 9th Internat. Colloquium on Group Theoretical Methods in Physics*, volume 135 of *Lecture Notes in Physics*, pages 165–169, Cocoyoc, 1980. Springer, Berlin, 1980.
  81. J. Patera, P. Winternitz, and H. Zassenhaus. Maximal Abelian subalgebras of  $sp(2n, \mathbb{R})$  and their applications in physics. In *Proc. 9th Internat. Colloquium on Group Theoretical Methods in Physics*, volume 135 of *Lecture Notes in Physics*, pages 512–516, Cocoyoc, 1980. Springer, Berlin, 1980.
  82. P. Winternitz. Maximal subgroups of the conformal group and tensor fields in compactified Minkowski space. In *Proc. Second Workshop on Current Problems in High Energy Particle Theory*, Johns Hopkins, 1978. Johns Hopkins university Press, 1978.
  83. J. Bystricky, F. Lehar, J. Patera, and P. Winternitz. Optimal complete set of experiments for nucleon-nucleon elastic scattering. In *Proc. 8th Internat. Conf. on Few Body Systems and Nuclear Forces*, volume 87 of *Lecture Notes in Physics*, page 509, Graz, Austria, 1978. Springer, Berlin, 1978.
  84. M. Daumens, M. Perroud, and P. Winternitz. Group theoretical expansions of scattering amplitudes for particles with spin. In P. Kramer and A. Rieckers, editors, *Group Theoretical Methods in Physics*, pages 376–378, Tubbingen, 1977. Springer, Berlin, 1978.
  85. J. Patera, P. Winternitz, and H. Zassenhaus. The maximal Abelian subgroups of the conformal group of space-time. In P. Kramer and A. Rieckers, editors, *Group Theoretical Methods in Physics*, pages 388–389, Tubbingen, 1977. Springer, Berlin, 1978.

86. P. Winternitz. Analyse des données de diffusion à l'aide de développement à deux variables. In *Comptes Rendus des Journées d'Études Saturne*, Aussois, France, 1977. CEA, Paris, 1977.
87. P. Winternitz. Subgroups of Lie groups and symmetry breaking. In R. T. Sharp and B. Kolman, editors, *Group Theoretical Methods in Physics*, pages 549–572, Montreal, 1976. Academic Press, New York, 1977.
88. J. Patera, R. T. Sharp, P. Winternitz, and H. Zassenhaus. Casimir operators of real Lie algebras. In *Proc. Internat. Symposium on Math. Phys.*, pages 225–234, Mexico, 1976. CONACYT, Mexico, 1976.
89. P. Winternitz. Lie groups, their subgroups and symmetry breaking in quantum mechanics. In *Proc. Internat. Symposium on Math. Phys.*, pages 269–284, Mexico, 1976. CONACYT, Mexico, 1976.
90. J. Patera, R. T. Sharp, and P. Winternitz. Applications of group representation indices of higher order. In *Proc. Internat. Symposium on Math. Phys.*, pages 213–224, Mexico, 1976. CONACYT, Mexico, 1976.
91. J. Patera, R. T. Sharp, P. Winternitz, and H. Zassenhaus. Casimir operators of subalgebras of the Poincaré Lie algebra and of real Lie algebras of low dimension. In M. Boon A. Janner, T. Janssen, editor, *Group Theoretical Methods in Physics*, volume 50 of *Lecture Notes in Physics*, pages 500–515, Nijmegen, Holland, 1975. Springer, Berlin, 1976.
92. J. Bystricky, F. Lehar, and P. Winternitz. On the direct reconstruction of nucleon-nucleon scattering amplitudes. In *Proc. 4th Internat. Symposium on Polarization Phenomena in Nuclear Reactions*, pages 462–463, Zurich, 1975. 1975.
93. M. Moshinsky, J. Patera, and P. Winternitz. Canonical transformations and a solvable model for the linear three body problem. In *Proc. Internat. Conf. on Few Body Problems in Nuclear and Particle Physics*, pages 88–89, Québec, 1974. Les Presses de l'Université Laval, 1974.
94. J. Patera and P. Winternitz. Group representations in orthogonal non-canonical bases, resolution of the missing label problem. In *Proc. Third Internat. Colloquium on Group Theoretical Methods in Physics*, pages 511–521, Marseille, 1974. CNRS, Marseille, 1974.
95. J. Patera, P. Winternitz, and H. Zassenhaus. On the classification of continuous subgroups of Lie groups. In *Proc. Third Internat. Colloquium on Group Theoretical Methods in Physics*, pages 501–510, Marseille, 1974. CNRS, Marseille, 1974.
96. P. Winternitz. Two-variable expansions based on the Lorentz and conformal groups. In A. O. Barut and W. E. Brittin, editors, *Lectures in Theoretical Physics*, volume 13, pages 231–252, Boulder, Colorado, 1970. Colorado Associated Univ. Press, Boulder, 1971.

97. P. Winternitz. Weak neutral currents and polarization effects in high energy lepton proton scattering. In G. Shapiro, editor, *Proc. Second Internat. Conf. on Polarized Targets*, pages 145–152, Berkeley, California, 1970. University of California Press, Berkeley, 1971.
98. P. Pajas and P. Winternitz. Two-dimensional relativistic expansions of the scattering amplitudes. In *Topics in Elementary Particle Theory*, Varna, Bulgaria, 1968. JINR, Dubna, USSR, 1968.
99. P. Winternitz. The role of symmetries in quantum and classical mechanics. In *Proc. Conf. Devoted to the 40th Anniversary of Quantum Mechanics*, Dubna, USSR, 1967. JINR, Dubna, USSR, 1967.
100. P. Winternitz, A. Makarov, and V. H. Nguyen. Two-meson annihilation of antiprotons and higher symmetries. In V. P. Shelest, editor, *High Energy Physics and Elementary Particle Theory*, pages 443–447, Jalta, USSR, 1966. Naukova Dumka, Kiev, 1967.