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**LIST OF PUBLICATIONS**
**of Jamil Daboul**

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# 1 Refereed Publications

1. J. Daboul and R. Delbourgo, *Departure from $U_{12}$ in a relativistic quark model*, Nuovo Cimento 44, 1031-1046 (1966).

2. J. Daboul, *Are the residues of interaction poles in the N/D method a right measure of the forces?*, Phys. Lett. 23, 592-594 (1966).

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4. J. Daboul, *Conditions on density matrix elements and their application in resonance production*, Nuclear Physics B4, 180-188 (1967).

5. J. Daboul, *Regge-Pole description of the photo production of vector mesons*, Nuclear Physics B7, 651-683 (1968).

6. J. Daboul, *Discontinuities of kinematic factors at zero masses and related problems*, Phys. Rev. 177, 2375-2389 (1969).

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9. J. Daboul, H.A. Gersch and T.H. Kwon, *Dynamical characteristics of a Heisenberg spin cluster*, J. of Physics C 4, 621-624 (1971).

10. J. Daboul, *Scaling symmetry of scattering amplitudes*, Phys. Rev. D 30, 1156-1161 (1971).

11. J. Daboul, *A scaling symmetry in thermodynamics or generalization of the law corresponding states*, Phys. Rev. A4, 1583-1589 (1971).

12. J. Daboul and J.H.D. Jensen, *Radiation reaction of a rotating rigid surface-charged sphere*, Zeit. Physik 265, 455-478 (1973).

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14. J. Daboul, *On generalizing Abraham-Lorentz equation*, International Journal of Theor. Phys. 11, 145-147 (1974).

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16. R.H. Barron and J. Daboul, *The $S_{11} - P_{11}$ Phase Shifts of Pion-Nucleon Scattering*, Z. Physik A 274, 399-406 (1975).

17. J. Daboul, *Incorporation Castillejo-Dalitz-Dyson poles as input in $N/D$ calculations*, Phys. Rev. D 12, 888-891 (1975).

18. J. Daboul and M. Krammer, *Electromagnetic mass differences of the Old and the Charmed mesons*, Phys. Lett. 64 B, 341-344 (1976).

19. J. Daboul and Z.J. Rek, *Hadron scattering in an additive eikonal quark model*, Phys. Lett. 66 B, 159-164 (1976).

20. J. Daboul and Z.J. Rek, *High Energy pp Scattering in the Additive Eikonal Quark Model*, Bulletin De L'Academie Polonaise Des Sciences-Serie des Sciences Math. Astr. et Phys. 26, 925-930 (1978).

21. J. Daboul and B. Z. Kaplan, *Solutions for a three-dimensional nonlinear stabilized oscillator*, Int. Jour. Circuit Theory and Applications 14, 277-293 (1986).

22. J. Daboul, B.Z. Kaplan and D. Kottik, *Analysis of a symmetrical stabilized three-phase oscillator and some of its applications*, IEEE Trans. on Circuits and Systems 34, 561-565 (1987).

23. J. Daboul, *Entropy, Information and Doubly Stochastic Transformations*, Phys. Lett. A 159, 213-220 (1991)

24. J. Daboul, *Increase of Average Energy by the Process of Measurement*, Europhys. Lett. 18, 189-194 (1992)

25. S. S. Mizrahi and J. Daboul, *Squeezed States, Generalized Hermite Polynomials and Pseudo-Diffusion equation*, Physica A 189, 635-650 (1992)

26. J. Daboul, P. Slodowy and C. Daboul, *The Hydrogen Algebra as Centerless Kac-Moody Algebra*, Phys. Lett. B 317, 321-328 (1993).

27. J. Daboul, *Addition theorems for invariants of $SO(N)$ and $O(p,q)$*, Anales de Física, Monografías 1, 317-320 (1993).

28. J. Daboul and M. M. Nieto, *Quantum bound states with zero binding energy*, Phys. Lett. A 190, 357-362 (1994).

29. J. Daboul, M. Marchiolli and S. S. Mizrahi, *General Solutions of the pseudo-diffusion equation of squeezed states*, J. Phys. A : Math. Gen. 28, 4623-4637 (1995).

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33. J. Daboul and P. Rathie, *Generalized Parity and r-Polynomials*, Int. J. Math. & Stat. Sci. 5, 179-196, (1996)

34. C. Daboul and J. Daboul, *From hydrogen atom to generalized Dynkin diagrams*, Phys. Lett. B 425, 135-144 (1998).

35. J. Daboul and R. Delbourgo, *Matrix Representation of Octonions and Generalizations*, J. Math. Phys. 40, 4134-4150 (1999)

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37. S. D. Bartlett, D. A. Rice, B. C. Sanders, J. Daboul, and H. de Guise, *Unitary transformations for testing Bell inequalities*, Phys. Rev. A 63, 042310 (2001)

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41. J. Daboul and Salomon S. Mizrahi, *O(N) Symmetries, sum rules for generalized Hermite polynomials and squeezed states*, J. Phys. A: Math Gen. **38**, 427-448, 2005.

42. P. Cordero and J. Daboul, *Analysis of the spectrum generating algebra method for obtaining energy spectra*, J. Math. Phys. **46**, 053507-12, 2005; arXiv:quant-ph/0503011v1

43. J. Daboul and K.B. Wolf, *Noncommuting contractions of oscillators with constant force*, J. Phys. A: Math Gen. **39**, 4173-4180, 2006.

44. J. Daboul, *Contractions of broken symmetries via Kac-Moody formalism*, J. Math. Phys. **47**, 083507-20, 2006; arXiv:math-ph/0608008v1

45. Claudia Daboul, J. Daboul and Marc de Montigny, *Gradings and contractions of affine Kac-Moody algebras*, J. Math. Phys. **49**, 063509-26, 2008.

46. J. Daboul, C. Daboul and M. de Montigny, *Contractions of affine Kac-Moody algebras*, J. Phys.: Conf. Ser. **128**, 012054-12, 2008.

47. Claudia Daboul, J. Daboul and Marc de Montigny, *Embedding of open superalgebras into affine KacMoody superalgebras*, J. Math. Phys. **51**, 053521-15, 2010.

48. Claudia Daboul, J. Daboul and Marc de Montigny, *How to embed 'open' Lie superalgebras into affine Kac-Moody superalgebras*, J. Phys.: Conf. Ser. **284**, 012018, 2011 (Free download 10 pages).

# 2  Articles in Proceedings

1. J. Daboul, *Inequalities, Irreversibility and Doubly Stochastic Matrices*, Semin'ario Brasileiro de Análiste, 33, 303-329 (1991)

2. J. Daboul, *Decrease of Entropy and Increase of Information Due to Doubly Stochastic Transformations*, In "Classical And Quantum Systems - Foundations And Symmetries ": Proceedings of the 2nd International Wigner Symposium, 16-20 July, 1991, H. D. Doebner, W. Scherer and F. Schroeck, Jr., (Eds). (World Scientific, Singapore 1993) p. 513-514.

3. J. Daboul, *Wave and Pseudo-diffusion Equations from Squeezed States*, Proceedings of the Second International Workshop on Squeezed States and Uncertainty Relations, Moscow 1992, D. Han, Y.S. Kim and V.I. Man'ko (Eds.) (NASA Conf. Publ. 3219, Goddard Space Flight Center, Greenbelt, Maryland 1993) p. 377-381.

4. M. M. Nieto and J. Daboul, *Exact, E=0, Classical and Quantum Solutions For General Power-Law Oscillators*, Proceedings of the second International Workshop on Harmonic Oscillators, Cocoyoc, MEXICO, March 23-25, 1994, D. Han and K.B. Wolf (Eds.) (Nasa Conference Publications 3286) p. 13-24 (hep-th/9406088)

5. C. Daboul, J. Daboul, and P. Slodowy *The Dynamical Algebra of the Hydrogen Atom as a Twisted Loop Algebra*, Proceedings of the XX International Colloquium on " Group Theoretical Methods in Physics", Osaka, July 4-9, 1994, A. Arima, T. Eguchi and N. Nakanishi (Eds.), (World Scientific, Singapore, 1995) p. 175-178 (hep-th/9408080)

6. J. Daboul, *New Interpretation of the Wigner Function*, Proceedings of the Fourth International Conference on Squeezed States and Uncertainty Relations, Taiyuan, Shanxi 1995 D. Han, Kunchi Peng, Y.S. Kim and V.I. Man'ko (Eds.) (NASA Conf. Publ. 3322, Maryland 1996) p. 25-28.

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10. J. Daboul and Mark Hickman, *Pseudo-free Hamiltonians with elliptical orbits*, Proceedings of Sede Boqer Fete 1999, BGU publication.

11. J. Daboul, *Black-Scholes and the diffusion equations* , Proceedings of Sede Boqer Fete 2000, BGU publication.