

# Curriculum Vitae

## i) Personal Data:

Name : M. Sebaweh Abdalla

Date of Birth : 01-01-1951

Place of Birth: Cairo-Egypt

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## ii) Education:

King's College, London University, U.K.,1979-1982, Ph.D. (Math).

King's College, London University, U.K.,1977-79, M.Sc. (Math).

Ain Sham University, Faculty of education, Cairo,1974, B.Sc. (Math).

## iii) Scientific Employment:

1979-1981 Demonstrator, Mathematics Department,Chelsea College, London.

1982-1986 Assistant Professor, Mathematics Department,King Saud University.

1986-1990 Associate Professor, Mathematics Department,King Saud University.

1991-Professor, Mathematics Department,King Saud University.

## iv) Membership of Scientific Societies:

1. Reviewer for the IOP Journals (UK).
2. Institute of Physics (Fellowship) (U.K.).
3. American Institute of Physics (U.S.A.).
4. Senior member in Optical Society of America (U.S.A.).
5. European Optical Society (Germany).
6. Egyptian Mathematical Society (Cairo).
7. American Mathematical Society (U.S.A.).
8. Editor in chief of International Journal of theoretical and Mathematical physics.

<http://www.sapub.org/journal/editorialdetails.aspx?JournalID=1070&PersonID=15053>

9. Board member in Applied Mathematics & Information Sciences.

10. Board member in ISRN Mathematical physics.

v) **Author of two books:**

1. Analytic Treatment of Quantized Electromagnetic Field.

2. Quantum Mechanics Models.

vi) **Supervision:**

1. One Ph.D. Student (4 published papers in **ISI** Journal).

2. Three M.Sc. Student (3 published papers one with each student in **ISI** Journal).

3) One M.Sc. Student (without publication).

vii) **Selected to be one out of 381 leading scientists and engineers of OIC Member states.**

viii) **Awarded the University Shield**

IV) Editor in chief (International Journal of Theoretical and Mathematical Physics)

<http://www.sapub.org/journal/aimsandscope.aspx?journalid=1070>

X) **Academic published Work:**

1) R.K. Colegrave and *M. Sebawe Abdalla*, A canonical description of the Fabry - Peröt Cavity. Optica Acta **28** (1981) 495.

2) R.K. Colegrave and *M. Sebawe Abdalla*, Harmonic oscillator with exponentially decaying mass. J. Phys. A: Math. Gen. **14** (1981) 2269.

3) R.K. Colegrave and *M. Sebawe Abdalla*, Harmonic oscillator with strongly pulsating mass. J. Phys. A: Math. Gen. **15** (1982) 1549.

4) R.K. Colegrave and *M. Sebawe Abdalla*, Field fluctuations in a Fabry- Peröt Cavity in resonance with a reservoir of two-level atoms, I. Adiabatic fluctuations. Optica Acta **30** (1983) 849.

5) R.K. Colegrave and *M. Sebawe Abdalla*, Field fluctuations in a Fabry- Peröt cavity in resonance with a reservoir of two-levels atoms II. Non-adiabatic periodic fluctuations Optica Acta **30** (1983) 861.

6) R.K. Colegrave and *M. Sebawe Abdalla*, Invariants for the time-dependent harmonic oscillator: I. J. Phys. A: Math. Gen **16** (1983) 3805.

- 7) R.K. Colegrave, *M. Sebawe Abdalla*, and M.A. Mannan, Invariants for the time-dependent harmonic oscillator II: Cubic and quartic invariants, *J. Phys. A:Math. Gen.* **17** (1984) 1567.
- 8) *M. Sebawe Abdalla* and R.K. Colegrave, A model for modulated damping or growth of a Harmonic oscilator in classical or quantum mechanics, *Lett. IL.Nuovo Cimento* **39** (1984) 373.
- 9) *M. Sebawe Abdalla* and R.K. Colegrave, Harmonic oscillator with strongly pulsating mass under the action of a driving force. *Phys. Rev. A* **32** (1985)1958.
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- 12) *M. Sebawe Abdalla*, R.K. Colegrave and Aflatoun Khosravi, The pulsating harmonic oscillator. *IL Nuovo Cimento B* **93** (1986) 195.
- 13) *M. Sebawe Abdalla*, Time-dependent harmonic oscillator with variable mass under the action of a driving force. *Phys. Rev. A* **34** (1986) 4598.
- 14) *M. Sebawe Abdalla*, S.S. Hassan and A-S.F. Obada. Multiphoton transition in the Tavis-Cummings model. *Phys. Rev. A* **34** (1986) 4869.
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- 16) *M. Sebawe Abdalla*, Charged harmonic oscillator in the presence of electric and magnetic fields. *IL Nuovo Cimento B* **101** (1988) 267.
- 17) *M. Sebawe Abdalla*, R.K. Colegrave and A.A. Selim, The effect of periodic energy exchange in the frequency converter. *Physica A* **51** (1988) 467.
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- 19) *M. Sebawe Abdalla*, and Ursula A.T. Ramjit, Quantum mechanics of the damped pulsating oscillator. *J. Math. Phys.* **30** (1989) 60.

- 20) *M. Sebawe Abdalla*, M.M.A. Ahmed, and A-S.F. Obada, Dynamics of a non- linear Jaynes-Cummings model. *Physica A* **162** (1990) 215.
- 21) *M. Sebawe Abdalla*, Quantum mechanics of field attenuation by photon detection. *Physica A* **162** (1990) 241.
- 22) *M. Sebawe Abdalla* and S.S. Hassan, Squeezing in a photodetection model. *Physica A* **163** (1990) 822.
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- 24) *M. Sebawe Abdalla*, and M.A. Al-Gwaiz, The damped pulsating oscillator with a stochastic driving force. *IL Nuovo Cimento B* **105** (1990) 401.
- 25) *M. Sebawe Abdalla*, Eigenfunctions and Eigenvalues for a two-mode squeezed operator. *IL Nuovo Cimento B* **105** (1990) 799.
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