CURRICULUM VITAE

of

Dr. EMAD KHEDER EL HEFNY A TTIA El SHEWY

Prof. of Theoretical Physics

Physics Department, Faculty of Science, TaibahUniversity, Kingdom of Saudi Arabia

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Current position	**Prof. of Theoretical Physics**
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Scientific Qualification

1. **B. Sc.** (Physics), May 1991, (Excellent) Mansoura University, Egypt.
2. **M. Sc.** (Physics), November 25, 1996, Mansoura University, Egypt.
3. **Ph. D. Science** (Physics), August 28, 2002, Mansoura University, Egypt (Theoretical physics) as Joint supervision of Mansoura University and the University of Warwick (England), under the supervision of the main supervisor Professor George Ronald, professor at the University of Warwick (England).

Academic Appointment

1. **Administrator**, Physics Department, Faculty of Science, Mansoura University, November 12, 1991 – January 19, 1997.
2. **Assistant Lecturer**, Physics Department, Faculty of Science, Mansoura University, January 20, 1997, November 24, 2002.
3. **Lecturer**, Physics Department, Faculty of Science, Mansoura University, November 25, 2002 - November 24, 2007.
4. **Ass. Professor**, Department of Physics, Faculty of Science, Mansoura University December 24, 2007 - December 30, 2012.
5. **Professor**, Department of Physics, Faculty of Science, Mansoura University December 30, 2012- up to now.

Membership in Scientific Societies

- Member of the Egyptian Solid State Science Society
- Member of Egyptian Syndicate of Scientific Profession
- Member of Mansoura University Society of environment

Scientific School

- Theoretical Physics Group, Physics Department, Faculty of Science, Mansoura University, Mansoura, Egypt
- Non-linear Applied Sciences Group, Faculty of Science, Taibah University, Kingdom of Saudi Arabia

Scientific Publications

- **96 papers 93 published in International and Egyptian Journals- 3 accepted papers. This research Contributed in discovering phenomena in the mesosphere and the F ring of Saturn**.

Scientific awards and honors:

State Prize in the Physical Sciences - Arab Republic of Egypt in 2006 (Egyptian Academy of Scientific Research and Technology)

Honoring the Egyptian Syndicate of Scientific Professions, Cairo (2007)
Honoring the Egyptian Syndicate of Scientific Professions, Mansoura (2007)
Mansoura University in honor Science Day (2009)

Scientific Conferences: 8 Conferences

- 1. (First Cairo Conference on plasma physics and Applications 11-15 Oct. 2003 Cairo, Egypt)
- 2. (VII Radiation physics and Protection Conference 27- 30 November 2004 Ismailia, Egypt)
- 3. (International symposium on Nonlinear Dynamics, December 20-21, 2005, Shanghai, China)
- 4. Tenth International Conference on Chemistry and its applications, Mansoura University - 2007 Sharm el Sheikh, Egypt)
- 5. (Sixth Conference of the Nuclear and Particle Physics, Atomic Energy Authority - Luxor 2008, Egypt)
- 6. (First Student Conference, Faculty of Science, Mansoura University 2008 Mansoura, Egypt)
- 7. (Seventh, Conference of the Nuclear and Particle Physics, Atomic Energy Authority 2009 - Sharm el Sheikh, Egypt
- 8. 4th International Conference of Biological and Environmental Science, ICBES, Mansoura-Hurghada, Egypt on 24-28 March 2014.

Teaching Experiences

Courses taught for undergraduate students

1) General Physics
2) Thermodynamics
3) Statistical Thermodynamics
4) Physics of fluid
5) Reactor Physics
6) Nuclear Physics
7) Electrodynamics
8) Physical optics
9) Plasma Physics
10) quantum mechanics
11) statistical mechanics
12) Analytical Mechanics
13) physics of relativity
14) complex analysis
15) Special Functions
16) Electric circuit
17) Radiation protection

Courses taught for graduate students:

18) Nonlinear physics
19) Computational physics
20) Theoretical Solid State Physics

21) Nonlinear Plasma physics
22) Statistical mechanics
23) Nonlinear dynamical systems

Teaching experience within the Kingdom of Saudi Arabia:

- **Classical Mechanics 1**
- **Classical Mechanics 2**
- **Mathematical Physics 1**
- **Mathematical Physics 2**
- **Statistical physics**
- **electromagnetic 2**
- **Quantum Mechanics 1**
- **Quantum Mechanics 2**

Scientific Arbitration: referee scientific research in international periodicals such as:

1- Physics of plasmas- American Institute of Physics
2- Chaos, Solitons & Fractals- Elsevier
3- Astrophys Space Sci- Springer
4- Indian Journal of Physics- Springer
5- Journal of the Association of Arab Universities for Basic and Applied Science- Elsevier
6- Physical Review & Research International
7- Springerplus- Springe
8- European Physical Journal D – Springer
9- Advances in Space Research- – Springer
10- J. Plasma Physics - Cambridge University Press
11- Plasma Physics and Controlled Fusion- American Institute of Physics
12- Nonlinear science and numerical simulation- Elsevier
13- Journal of Ocean Engineering and Science

Referee Scientific Thesis:

4 Ph.D.
6 Master

Thesis Supervision:

6 Ph.D.
8 Master

SCIENTIFIC PRODUCTIONS

M. Sc. Thesis

"Lie Point Symmetry For Some Mathematical Physics Equations", November 25, 1996, Mansoura University, Mansoura, Egypt

Ph. D. Thesis

"A Study of Possible Improvement to the KdV equation to Describe Ion-Acoustic Waves in a Warm Plasma ", August 28, 2002, Mansoura University, Mansoura, Egypt.

Publications

1. Cylindrical electron acoustic solitons for modified time-fractional nonlinear equation, H. G. Abdelwahed, E. K. El-Shewy, and Abeer A. Mahmoud, Physics of Plasmas 24, 082107 (2017).
2. On the ion acoustic obliquely propagation in magnetized inhomogeneous plasmas, A. E. Mowafy, E. K. El-Shewy, H. G. Abdelwahed, Advances in Space Research 59, 1008–1013 (2017)
3. On the freak waves in mesospheric plasma, S K El-Labany, E K El-Shewy, N A El-Bedwehy, H N A El-Razek and A A El-Rahman, Indian J Phys 91(3):337–342 (2017).
4. Higher-order corrections to Earth's ionosphere shocks, H.G. Abdelwahed, E.K. El-Shewy, Commun. Theor. Phys. Commun. Theor. Phys. 67, 90–96 (2017).
5. Dust-ion acoustic freak wave propagation in a nonthermal mesospheric dusty plasma,S. K. El-Labany, E. K. El-Shewy, H. N. Abd El-Razek, A. A. El-Rahman, Plasma Physics Reports, 2017, 43, 5 576–582 (2017)
6. On the ion acoustic obliquely propagation in magnetized inhomogeneous plasmas, A. E. Mowafy, E. K. El-Shewy, H. G. Abdelwahed, Advances in Space Research 59, 1008–1013 (2017)

7. On the freak waves in mesospheric plasma, S K El-Labany, E K El-Shewy, N A El-Bedwehy, H N A El-Razek and A A El-Rahman, Indian J Phys 91(3):337–342 (2017).
8. Higher-order corrections to Earth's ionosphere shocks, H.G. Abdelwahed, E.K. El-Shewy, Commun. Theor. Phys. Commun. Theor. Phys. 67, 90–96 (2017).
9. Dust-ion acoustic freak wave propagation in a nonthermal mesospheric dusty plasma,S. K. El-Labany, E. K. El-Shewy, H. N. Abd El-Razek, A. A. El-Rahman, Accepted in Plasma Physics Reports (2016).
10. On the freak waves in mesospheric plasma, S K El-Labany, E K El-Shewy, N A El-Bedwehy, H N A El-Razek and A A El-Rahman, Indian J Phys, DOI 10.1007/s12648-016-0929-3 (2016).
11. Higher-order corrections to Earth's ionosphere shocks, H.G. Abdelwahed, E.K. El-Shewy, Accepted in Commun. Theor. Phys. 65 (2016) 606–612.
12. Nonlinear Dust Acoustic Waves in Dissipative Space Dusty Plasmas with Superthermal Electrons and Nonextensive Ions, A.M. El-Hanbaly, E.K. El-Shewy, M. Sallah and H.F. Darweesh, Commun. Theor. Phys. 65 (2016) 606–612.
13. Time Fractional Effect on Ion Acoustic Shock Waves in Ion-Pair Plasma, H. G. Abdelwahed, E. K. El-Shewy, and A. A. Mahmoud, Journal of Experimental and Theoretical Physics, 2016, 122, 5, 1111–1116.
14. Influence of ionic temperature on the acoustic dressed soliton in plasma with Maxwellian positrons E K El-Shewy, N F Abdo and M S Yousef, Indian J Phys (2016) 90(8):959–963.
15. Modified electron acoustic field and energy applied to observation data, H. G. Abdelwahed and E. K. El-Shewy, Physics of Plasmas 23, 082118 (2016); doi: 10.1063/1.4961239.
16. On Time-Fractional Cylindrical Nonlinear Equation, H. G. Abdelwahed, E. K. ElShewy, A. A. Mahmoud, CHIN. PHYS. LETT. 33, 11 (2016) 115201.
17. Rogue Waves for Kadomstev-Petviashvili Solutions in a Warm Dusty Plasma with Opposite Polarity, E. K. El-Shewya, c, H. G. Abdelwahed, N. F. Abdo, and R. A. Shahein, Moscow University Physics Bulletin, 2016, 71, 3, 284–291, (2016).
18. Compressive and rarefactive dressed solitons in plasma with nonthermal electrons and positrons, H. G. Abdelwahed, E. K. El-Shewy, M. A. Zahran and S. A. Elwakil, Physics Of Plasmas, 23, 022306 (2016).
19. On the rogue wave propagation in ion pair superthermal plasma, H. G. Abdelwahed, E. K. El-Shewy, M. A. Zahran and S. A. Elwakil, Physics Of Plasmas, 23, 022102 (2016).
20. Self-similar solutions for some nonlinear evolution equations: KdV, mKdV and Burgers equations, SA El-Wakil, EM Abulwafa, AM El-hanbaly, EK El-Shewy, H.M. Abd-El-Hamid, Journal of the Association of Arab Universities for Basic and Applied Sciences 19, 44–51 (2016).

21. Linear and nonlinear analysis of dust acoustic waves in dissipative space dusty plasmas with trapped ions, AM El-Hanbaly, E K El-Shewy, M Sallah, H F Darweesh, Journal of Theoretical and Applied Physics, 9, 3, 167 (2015)
22. Propagation of Electron Acoustic Soliton, Periodic and Shock Waves in Dissipative Plasma with a q-Nonextensive Electron Velocity Distribution AM El-Hanbaly, EK El-Shewy, A Elgarayhi, AI Kassem, Communications in Theoretical Physics 64 (5), 529 (2015)
23. Kinematic dust viscosity effect on linear and nonlinear dust-acoustic waves in space dusty plasmas with nonthermal ions, AM El-Hanbaly, M Sallah, EK El-Shewy, HF Darweesh, Journal of Experimental and Theoretical Physics 121 (4), 669 (2015)
24. Time-fractional effect on pressure waves propagating through a fluid filled circular long elastic tube, EM Abulwafa, EK El-Shewy, AA Mahmoud, Egyptian Journal of Basic and Applied Sciences ARTICLE IN PRESS (2015)
25. Linear and nonlinear analysis of dust acoustic waves in dissipative space dusty plasmas with trapped ions, AM El-Hanbaly, E K El-Shewy, M Sallah, H F Darweesh, Journal of Theoretical and Applied Physics, 9, 3, 167 (2015)
26. Effect of electron beam on the properties of electron-acoustic rogue waves, E. K. El-Shewy, S. A. Elwakil, A. M. El-Hanbaly and A. I. Kassem, J. Plasma Physics 81, 905810204 (2015).
27. EFFECT OF ION KINEMATIC VISCOSITY ON DIFFERENT RADIATIVE COOLING MODES IN SPACE DUSTY PLASMA H.F. Darweesh, A.M. El-Hanbaly, M. Sallah, E.K. El-Shewy, Proceedings of the 9th Conference on Nuclear and Particle Physics, 19-23 Oct. 2015, Luxor-Aswan, Egypt.
28. Effect of nonthermality fraction on dust acoustic growth rate in inhomogeneous viscous dusty plasmas, E. K. El-Shewy, S. A. El-Wakil, A. M. El-Hanbaly, M. Sallah, H. F. Darweesh, Astrophysics and Space Science, 356, 2, 269-276 (2015).
29. Effect of nonextensive electron and ion on dust acoustic rogue waves in dusty plasma of opposite polarity, S K Zaghbeer, H H Salah, N H Sheta, EK El-Shewy, A Elgarayhi, Astrophysics and Space Science, 353 (2), 493-500 2014.
30. Rogue waves for Kadomstev-Petviashvili equation in electron-positron-ion plasma, SA El-Wakil, EM Abulwafa, A Elhanbaly, EK El-Shewy, Astrophysics and Space Science 353 (2), 501-506 2014.
31. Nonlinear electron-acoustic rogue waves in electron-beam plasma system with non-thermal hot electrons, S A Elwakil, A M El-hanbaly, A Elgarayhi, EK El-Shewy, AI Kassem, Advances in Space Research 54 (2014) 1786–1792.
32. Self-similar solutions for some nonlinear evolution equations: KdV, mKdV and Burgers equations, SA El-Wakil, EM Abulwafa, AM El-hanbaly, EK El-Shewy, Journal of the Association of Arab Universities for Basic and Applied Sciences, , http://dx.doi.org/10.1016/j.jaubas.2014.06.007, In Press 2014.

33. Symmetries and exact solutions of KP equation with an arbitrary nonlinear term SA Elwakil, AM El-Hanbaly, EK El-Shewy, IS El-Kamash, J Theor Appl Phys 8:93–102 (2014).
34. Space—time fractional KdV—Burgers equation for dust acoustic shock waves in dusty plasma with non-thermal ions, EK El-Shewy, AA Mahmoud, AM Tawfik, EM Abulwafa, A Elgarayhi, Chinese Physics B 23 (7), 070505 (2014).
35. Dust acoustic shock waves in dusty plasma of opposite polarity with non-extensive electron and ion distributions, SK Zaghbeer, HH Salah, NH Sheta, EK El-Shewy, A Elgarayhi, J. Plasma Physics 80 (03), 517-528 2014.
36. Effect of space-time fractional on the ion acoustic waves in electron-positron-ion plasma, SA El-Wakil, EM Abulwafa, A Elgarayhi, EK El-Shewy, AA Mahmoud and Ashraf M. Tawfik, Astrophysics and Space Science 350 (2), 591-598 (2014).
37. Effect of environmental factors on gene alterations in complex diseases: simulation study using Gene-Environment iNteraction Simulator 2, S Abdalla, Y Al-Hadeethi, EK El-Shewy, BMC Genomics, 15(Suppl 2):P47 (2014).
38. Electron acoustic soliton energy of the Kadomtsev-Petviashvili equation in the Earth's magnetotail region at critical ion density, S.A. Elwakil, A. M. El-hanbaly, E. K. El-Shewy, I. S. El-Kamash, **Astrophys Space Sci** 349, 197-203 2014.
39. Effect of space- time fractal order on the ion acoustic waves in electron-positron– ion plasma, S. A. El-Wakil, Essam M. Abulwafa, **Emad K. El-Shewy**, Abeer A. Mahmoud and Ashraf M. Tawfik**, Astrophys Space Sci**, (2014) 350: 591–598, DOI 10.1007/s10509-014-1785-2.
40. Nonlinear waves for blood flow in an artery, A. Elgarayhi, **E. K. El-Shewy**, Abeer A. Mahmoud and Ali A. Elhakem 4th International Conference of Biological and Environmental Science, **ICBES**, Mansoura-Hurghada, Egypt on 24-28 March 2014.
41. Propagation of Solitary Pressure Waves in Blood, A. Elgarayhi, **E. K. El-Shewy**, Abeer A. Mahmoud and Ali A. Elhakem 4th International Conference of Biological and Environmental Science, **ICBES**, Mansoura-Hurghada, Egypt on 24-28 March 2014.
42. On the speed and shape of electron acoustic solitary waves, **E. K. El-Shewy**, H.G. Abdelwahed, **Astrophys Space Sci**, 344:167–173 (2013).
43. Effect of nonthermality of ions on the nature of dust acoustic waves in two temperatures charged dusty grains, S.A. Elwakil, A. Elgarayhi, **E. K. El-Shewy**, Abeer A. Mahmoud, M.A. El-Attafi, **Astrophys Space Sci**, 343:661–666 (2013).
44. On the weakly nonlinear solitary pressure waves in a blood-filled thin elastic tube, A. Elgarayhi, E. K. El-Shewy, Abeer A. Mahmoud, Ali A. Elhakem, **Journal of Research & Reviews In BioSciences.** 7(9), 2013 [344-348].
45. Time-fractional Burgers equation for dust acoustic waves in a two different temperatures dusty plasma, S. A. El-Wakil, Essam M. Abulwafa, E. K. El-Shewy, Abeer A. Mahmoud, **Astrophys Space Sci** 2, 383-393, 2013.

46. Dust-acoustic solitary waves in a dusty plasma with dust of opposite polarity and vortex like ion distribution, M. A. Zahran, E. K. El-Shewy, H. G. Abdelwahed, , **J. Plasma Physics**, 1- 7, 2013, doi:10.1017 / S0022377813000603.

47. Nonlinear Ion Acoustic Waveforms for Kadomstev-Petviashvili Equation, S. A. El-Wakil, Essam M. Abulwafa, E. K. El-Shewy, H. G. Abdelwahed and H. M. Abd-El-Hamid, **Astrophys Space Sci**, 346, 141-147, 2013.

48. Improved speed and shape of ion-acoustic solitary waves in a warm plasma, **E. K. El-Shewy**, H.G. Abdelwahed, **Commun. Theor. Phys**. 60 (2013) 445–452.

49. Effect of Environmental factors on gene alterations in complex diseases: Simulation Study Using Gene Environment iNeraction Simulator, S. Abdalla, Y. Al-Hadeethi, **K. El-Shewy,** BMC Genomics 2014, 15(Suppl 2):P47**.**

50. Propagation of Nonlinear Pressure Waves in Blood, A. Elgarayhi, **E. K. El-Shewy**, Abeer A. Mahmoud, and Ali A. Elhakem, **ISRN Computational Biology**, 436267, 2013.

51. Solitary, explosive and rational solutions for nonlinear electron-acoustic waves with non-thermal electrons, S. A. El-Wakil, **E. K. El-Shewy**, H. M. Abd-El-Hamid E. M. Abulwafa, International Journal of Nonlinear Science, 13(2012) No.2,pp.163-169.

52. Ion-acoustic waves in unmagnetized collisionless weakly relativistic plasma of warm-ion and isothermal-electron using time-fractional KdV equation, S. A. El-Wakil, Essam M. Abulwafa, **E. K. El-Shewy** , A. A. Mahmoud, **Advances in Space Research** 49 (2012) 1721–1727.

53. Positron acoustic solitary waves interaction in a four-component space plasma, E. F. El-Shamy, W. F. El-Taibany, **E. K. El-Shewy** and Kh. H. El-Shorbagy, **Astrophys Space Sci** , 2 (2012) 279-285.

54. Effect of nonthermality of electrons on the speed and shape of ion-acoustic solitary waves in a warm plasma, H. G. Abdelwahed and E. K. El-Shewy, **Phys. Plasmas** 19, 072301 (2012); doi: 10.1063/1.4731715.

55. Nonlinear waveforms for Ion acoustic waves in weakly relativistic plasma of warm ion fluid and isothermal electrons, S.A. El-Wakil, Essam M. Abulwafa, **E.K.El-Shewy**, H.G.Abdelwahed, and Hamdi M. Abd-El-Hamid **Advances in Mathematical Physics**, ID529121,12, doi:10.1155/2012/529121 (2012).

56. Time-fractional study of electron acoustic solitary waves in plasma of cold electron and two isothermal ions, S. A. El-Wakil, Essam M. Abulwafa, **E. K. El-Shewy** , A. A. Mahmoud, **J. Plasma Physics**, 78, 6, 641 (2012).

57. **E. K. El-Shewy**, M. I. Abo el Maaty, H. G. Abdelwahed, and M. A. Elmessary, Dust Acoustic Solitary Waves in Saturn F-ring's Region, **Commun. Theor. Phys.** 55 (2011) 143–150.

58. **E. K. El-Shewy**, M. I. Abo el Maaty, H. G. Abdelwahed, and M. A. Elmessary, Solitary solution and energy for the Kadomstev- Petviashvili equation in two temperatures charged dusty grains, **Astrophys Space Sci** (2011) 332: 179–186.

59. Ion-Acoustic Waves in Plasma of Warm Ions and Isothermal Electrons using Time-Fractional KdV Equation, , Said A. El-Wakil, Essam M. Abulwafa, **E. K. El-Shewy**, Abeer A. Mahmoud, **Chin. Phys. B** Vol. 20, No. 4 (2011) 040508.

60. Solitary, Explosive, Rational and Elliptic Doubly Periodic Solutions for Nonlinear Electron-Acoustic Waves in the Earth's Magnetotail Region with Cold Electron Fluid and Isothermal Ions, S. A. El-Wakil, E. M. Abulwafa, M. A. Abdou, **E. K. El-Shewy** and H. M. Abd-El-Hamid, **Applications and Applied Mathematics** Vol. 6, Issue 11 (June 2011) pp. 1911– 1926.

61. Dust-acoustic solitary waves in a magnetized dusty plasma with dust opposite polarity. by S.A. Elwakil, M. T. Attia, **E. K. El-Shewy**, H. G. Abdelwahed, S. K. Zaghbeer, **Applications and Applied Mathematics** Vol. 6, Issue 11 (June 2011) pp. 1952– 1963.

62. Solution of perturbed Zakharov—Kuznetsov (ZK) equation describing, electron-acoustic solitary waves in a magnetized plasma , S.A. Elwakil, **E. K. El-Shewy**, H. G. Abdelwahed, **CHINESE JOURNAL OF PHYSICS** VOL. 49, NO. 3, 732 (2011).

63. Time-fractional KdV equation for electron-acoustic waves in plasma of cold electron and two different temperature isothermal ions, Said A. El-Wakil, Essam M. Abulwafa, **E. K. El-Shewy**, Abeer A. Mahmoud, **Astrophys Space Sci** (2011) 333: 269–276.

64. Effects of adiabaticity and non-adiabaticity of dust charge fluctuation on the propagation of the dust ion acoustic waves in inhomogeneous dusty plasma, S.A. Elwakil, M.A. Zahran, **E. K. El-Shewy**, A.E. Mowafy, **Advances in Space Research** 48 (2011) 1067–1075.

65. Solitary, explosive and periodic solutions for electron acoustic solitary waves with non-thermal hot ions, S.A. Elwakil, E.M. Abulwafa, **E. K. El-Shewy**, H.M. Abd-El-Hamid, **Advances in Space Research** 48 (2011) 1578–1590.

66. Periodic nonlinear waveforms and divergent pulses for Kadomstev-Petviashvili equation in a warm plasma, E M abulwafa, M A Abdou, **E. K. El-Shewy**, H G Abdelwahed, H. M. Abd-El-Hamid, NUPPAC, (2011).

67. Solitary solution for the KADOMSTEV-PETVIASHVILI equation at critical density, A.M. Elhanbly, **E. K. El-Shewy**, N.K. Radwan, I.S. El-kamash, NUPPAC,(2011).

68. Dust Acoustic Solitary Waves in Saturn F-ring's Region**, E.K. El-Shewy**, M.I. Abo el Maaty, H.G. Abdelwahed, and M.A. Elmessary , **Commun. Theor. Phys.** 55 (2011) 143–150.

69. Effect of the presence of excess superthermal hot electrons on electron-acoustic solitary waves in auroral zone plasma, **E. K. El-Shewy, Astrophys Space Sci** (2011) 335: 389-397.

70. Dust acoustic shock waves in two temperatures charged dusty grains, **E. K. El-Shewy**, H. G. Abdelwahed,and M. A. Elmessary, **Phys. Plasmas 18**, 113702 (2011); doi:10.1063/1.3654041.

71. Time-fractional KdV equation for plasma of two different temperature electrons and stationary ion, S. A. El-Wakil, Essam M. Abulwafa, **E. K. El-**

Shewy, and Abeer A. Mahmoud, **Phys. Plasmas 18**, 092116 (2011); doi:10.1063/1.3640533

72. Envelope ion-acoustic solitary waves in a plasma with positive-negative ions and nonthermal electrons, S.A. Elwakil, **E. K. El-Shewy**, and H.G. Abdelwahed, *Physics Of Plasmas*, Vol.17(2010), pp 052301.
73. Obliquely Propagating Electron-Acoustic Solitary Waves in Plasma with Nonthermal Electron**,** *S. A. Elwakil*, **E. K. El-Shewy**, *and H. G. Abdelwahed, NONLINEAR PHENOMENA IN COMPLEX SYSTEMS***,** Vol.13, No.3, (2010), 302.
74. Computational solutions for the Korteweg--de Vries equation in a warm plasma, E. K. El-Shewy, H.G. Abdelwahed, H. M. Abd-El-Hamid, *COMPUTATIONAL METHODS IN SCIENCE AND TECHNOLOGY* 16(1), 13-18 (2010).
75. New exact traveling wave solutions of nonlinear evolution equations with variable coefficients M. A. Abdou, **E. K. El-Shewy**, and H. G. Abdelwahed, Studies in Nonlinear Sciences 1 (4): 133-139, 2010.
76. Contribution of Higher-Order Dispersion to Nonlinear Dust Ion Acoustic Waves in Inhomogeneous Mesospheric Dusty Plasma with Dust Charge Fluctuation, *M. T. Attia, M. A. Zahran,* **E. K. El-Shewy**, *and A. E. Mowafy, Z. Naturforsch.* 65a, (2010), 91.
77. Improved dust acoustic solitary waves in two temperature dust fluids, **E. K. El-Shewy**, *H. G. Abdelwahed, M. I. Abo el Maaty and M. A. Elmessary, Applications and Applied Mathematics (AAM),* Vol. 5, No. 1 (2010) 26.
78. Propagation of Dust Acoustic Solitary Waves in Saturn F-ring's Region, M. I. Abo el Maaty, **E. K. El-Shewy**, H.G. Abdelwahed, and M. A. Elmessary, Electronic Journal of Theoretical Physics, Vol. 7. 24 (2010) 26.
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80. Solitary waves in space dusty plasma with dust of opposite polarity, S. A. El-Wakil, M. A. Zahran, E. K. El-Shewy, H. G. Abdelwahed, *NUPPAC, (2009).*
81. The Effect of Higher-Order Corrections on the Propagation of Nonlinear Dust-Acoustic Solitary Waves in a Dusty Plasma with Nonthermal Ions Distribution. H. G. Abdelwahed, **E.K. El-Shewy**, M.A. Zahran, and . T. Attia , *Z. Naturforsch.*, 2008; 63a: 261 – 272.
82. Contribution of higher order dispersion to nonlinear dust-acoustic solitary waves in dusty plasma with different sized dust grains and nonthermal ions **E. K. El-Shewy**, E.K., Zahran, M.A., Schoepf, K., Elwakil, S.A. *Physica Scripta* (2008) 78 (2) 025501.
83. Electrostatic waves in dusty plasma, first student Conference, faculty of Science, Mansoura University (2008).
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85. Linear and nonlinear properties of electron-acoustic solitary waves with non-thermal electrons, **E.K.El-shewy**. *Chaos, Solitons & Fractals* (2007); 31: 1020.

86. Nonlinear electron-acoustic solitary waves in a relativistic electron-beam plasma system with non-thermal electrons, S.A. Elwakil, M.A. Zahran, **E. K. El-Shewy**. *Physica Scripta* 75 (6) (2007) 803-808.

87. Higher-order solution of an electron-acoustic solitary waves with non-thermal electrons, **E.K.El-shewy**. *Chaos, Solitons & Fractals* 2007;34: 628.

88. Higher-order solution of an electron-acoustic solitary waves with non-thermal electrons, S.A. Elwakil, M.A. Zahran, **E. K. El-Shewy,** *NUPPAC* (2007) 431.

89. A Simple Map Between Fokker-Planck Equation and Its Fractional Form, S.A. Elwakil, M.A. Zahran, **E. K. El-Shewy**, *NUPPAC,* (2007) 373.

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