

PERSONAL INFORMATION

Attia Ibrahim Kassem Kassem



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Sex Male | Date of birth 03/02/1989 | Nationality Egyptian

DESIRED EMPLOYMENT /
OCCUPATIONAL FIELD

Assistant Lecturer at Physics Department, Faculty of Science, Mansoura University, Egypt.

WORK EXPERIENCE

2010 - 2015

Researcher and Demonstrator (Teaching Assistant)

Physics Department, Faculty of Science, Mansoura University, Mansoura, Egypt

- Associated member of Theoretical Physics Group, Physics Department, Faculty of Science, and Surveying under supervision of Prof. Dr. Sayed El-Wakil professor of Theoretical nuclear physics.

EDUCATION AND TRAINING

2018-2023

ph.D in Plasma Physics

Moscow Institute of Physics and Technology(State University), Moscow, Russia

2013 –2015

Master in Theoretical Physics

Physics Department, Faculty of Science, Mansoura University (Egypt)
Thesis entitle: "Propagation of Solitary and Rogue Waves in Plasma "

2011 –2012

Premaster in Theoretical Physics

Physics Department, Faculty of Science, Mansoura University (Egypt)

- I've studied the following courses:

Advanced Course in Plasma, Statistical Physics, Advanced Quantum Mechanics, Mathematical Physics, Theoretical Reactor Physics, and Quantum optics, High Energy Physics, Theoretical Solid State Physics Linear Dynamic System, Nonlinear Wave and Bio-mathematical.

2006- 2010

Bachelor of Science in Physics and a grade Very Good with honor (82, 7%).

Physics Department, Faculty of Science, Mansoura University (Egypt)

PERSONAL SKILLS

Mother tongue(s)	Arabic
Other language(s)	English language Russian language
Computer skills	<ul style="list-style-type: none"> ▪ MS Office: Word, Excel, Access, PowerPoint. ▪ Scientific Work Place (LaTeX). ▪ Acquainted with FORTRAN Language. ▪ Acquainted with Mathematica used. ▪ Windows (10, 8, 7, XP), ICDL.
Other skills	<ul style="list-style-type: none"> ▪ Enjoy all sports particularly swimming and running. ▪ Love to travel and experience different cultures.
Publications	<ul style="list-style-type: none"> ▪ S.A.El-Wakil, A.M.El-hanbaly, E.K.El-Shewy, A.Elgarayhi, A.I. Kassem, Nonlinear electron-acoustic rogue waves in electron-beam plasma system with non-thermal hot electrons. <i>J. Advances in Space Research</i> 54 (2014) 1786–1792. ▪ S.A.El-Wakil, A.M.El-hanbaly, E.K.El-Shewy, A.I. Kassem, Effect of electron-beam on the properties of electron-acoustic rogue waves. <i>J. Plasma Phys.</i> 81 (2015) 905810204. ▪ A.M. El-hanbaly, E.K. El-Shewy, A. Elgarayhi, A.I. Kassem, Propagation of electron acoustic soliton, periodic and shock waves in dissipative plasma with a q- nonextensive electron velocity distribution. <i>J. Commun. Theor. Phys.</i> 64 (2015) 529–536. ▪ A.M. El-hanbaly, E.K. El-Shewy, A.I. Kassem, H.F. Darweesh, Nonlinear Electron Acoustic Waves in Dissipative Plasma with Superthermal Electrons. <i>Applied Phys. Research</i> 8 (1) (2016) 64–80. ▪ S. A. El-Wakil, E. M. Abulwafa, A. M. El-Hanbaly, A. I. Kassem, Double-layers and solitary waves in electron-positron pair plasma with nonextensive electrons and stationary ions. <i>International Journal of Applied and Computational Mathematics</i> (2019). ▪ Popel S.I., Kassem A.I., Izvekova Yu.N., Zelenyi L.M., Lower-hybrid turbulence in the near-surface lunar dusty plasmas, <i>Physics Letters A</i>, 384(26), 126627 (2020). ▪ Izvekova Yu. N., Kassem A. I., Popel S. I., Morozova T. I. and Zelenyi L.M., Dusty plasmas at the Moon: Effects of magnetic fields, <i>J. Phys.: Conf. Ser.</i> 1787 (1), 012051 (2021). ▪ Popel S.I., Golub' A. P., Kassem A.I. and Zelenyi L.M., Dust Dynamics in the Lunar Dusty Plasmas: Effects of Magnetic Fields and Dust Charge Variations, <i>Phys. Plasmas</i>, vol. 29,

013701 (2022).

- Kasem A. I., Kopnin S. I., Popel S.I., Zelenyi L.M., Modified Kadomtsev–Petviashvili Equation for Description of Nonlinear Perturbations in Plasma of Lunar Dusty Exosphere, *Plasma Physics Reports*, vol. 48, No. 4 (2022).
- Попель С. И., Копнин С. И., Кассем А. И., Зеленый Л. М., К вопросу о роли магнитных полей в плазме запыленной экзосферы Луны, *Plasma Physics Reports*, vol. 48, No. 5 (2022).

Projects

- Nonlinear phenomena in plasma it was under supervision of Prof. Dr. A. Elgarayhi (2009-2010). My grade at this Project was Excellent with Honor.

Honours and awards

- The best dissertation master of science from Mansoura University Egypt in 2015

Conferences

- **A.I. Kassem**, A.M. Tawfik and H.F. Darweesh. Space Time Fractional Electron Acoustic Soliton and Shock Waves in Dissipative Plasma. 2nd workshop in plasma physics: Theory and Application 12/14 October 2014. Port Said, Egypt. Under the auspices of Port Said University and Alexander Von Humboldt Foundation (Germany).
- A.M. El-hanbaly, E.K. El-Shewy, A. Elgarayhi, **A.I. Kassem**. Electron acoustic soliton, periodic and shock waves in dissipative plasma with a non-thermal electron velocity distribution. 3rd International Conference on Advanced Materials & Their Applications 11-13 January 2015. National Research Centre, Egypt.
- A.M. El-hanbaly, E.K. El-Shewy, A. Elgarayhi, **A.I. Kassem**. Modulational instability and rogue waves in electron-beam plasma system with non-thermal electrons. 12th International Conference on Chemistry and its Role in Development, 16/20 March 2015. Mansoura-Sharm El-Sheik, Egypt.
- **A.I. Kassem**, A.M. El-hanbaly, E.K. El-Shewy, A. Elgarayhi. Envelope electron-acoustic solitary waves and their modulational instability in electron beam plasmas with superthermal electrons. 9th Conference on Nuclear and particle physics, 19/23 October 2015, Aswan, Egypt.
- A.M. El-hanbaly, E.K. El-Shewy, **A.I. Kassem** and H. F. Darweesh. Soliton, Periodic and Shock Electron Acoustic Waves in Dissipative Plasma with Superthermal Electron. 9th Conference on Nuclear and particle physics, 19/23 October 2015. Aswan, Egypt.
- H. F. Darweesh, **A.I. Kassem** , Nonlinear Dust Acoustic Waves in Dissipative Dusty Plasma with Trapped Electrons, (April 2016), The Scientific Forum of Challenges in Physics and Energy, Faculty of Science, Mansoura University.
- The 6th Scientific Symposium for Young Researchers, Faculty of Science, Mansoura University, (April 2016).
- **A.I. Kassem**. Cosmic ray study using air shower time coincidence arrays (“The Knowledge Showers”). 8th International Advanced practice, (23 May -11 June 2016), in *JINR Dubna*, Moscow Region, **Russia**.
- Joint ICTP-IAEA College on Plasma Physics | (smr 2860), (7-18 November 2016), **ICTP, Trieste, Italy**.

- Izvekova Yu.N., Kassem A.I., Popel S.I., Morozova T.I., Zelenyi L.M. Dusty plasmas at the Moon: Effects of magnetic fields, XXXV International Conference on Equations of State for Matter (Elbrus, Russia, 2020). Book of Abstracts, Moscow, Chernogolovka, Nalchik, 2020, P. 280.
- Kassem A.I., Popel S.I., Izvekova Yu.N., Zelenyi L.M., Lower-hybrid waves in the exosphere of the Moon, XVII Conference of Young Scientists "Fundamental and Applied Space Research", 2020, IKI RAS, Moscow, Russia, P. 49-60.
- Popel S.I., Golub' A. P., Kassem A.I. and Zelenyi L.M., DUST DYNAMICS AT THE MOON: LEVITATION OR LOFTING, in: The Twelfth Moscow Solar System Symposium 2021, (IKI RAN, Moscow, Russia, 11-15 October 2021)
- Kassem A. I., Popel S. I., Golub' A. P., Zelenyi L.M., On the influence of the Earth's magnetic field on the dynamics of dust particles in the exosphere of the Moon, in: 64th International MIPT Scientific Conference 2021, (MIPT, Moscow region, Dolgoprudny, Russia, 29 November – 3 December)
- Кассем А. И., участвовал в первой международной конференции по космическому образованию: ДОРОГА В КОСМОС, (ИКИ РАН, Москва, Россия, 5-8 октября 2021 г.)
- Kassem A. I., Kopnin S.I., Popel S. I., Zelenyi L.M., CHARACTERISTIC BEHAVIOR OF DUST ACOUSTIC SOLITONS IN THE DUSTY PLASMA OF THE LUNAR EXOSPHERE, in: COMPLEX SYSTEMS OF CHARGED PARTICLES AND THEIR INTERACTIONS WITH ELECTROMAGNETIC RADIATION, (A.M. Prokhorov General Physics Institute of the Russian Academy of Science, Moscow, Russia, 11 – 13 April 2022)

References

Prof. A. M. El-Hanbaly

- Position: Prof. of theoretical physics.
- E-mail : a_elhanbaly@yahoo.com

Prof. E. M. Abulwafa

- Position: Prof. of theoretical physics.
- E-mail : abulwafa@mans.edu.eg

Prof. Emad Khedr El-Shewy

- Position: Prof. of theoretical physics.
- E-mail : emadshewy@yahoo.com

Prof. S. I. Popel

- Position: Doctor of Physical and Mathematical Sciences.
- E-mail : serg.i.popel@gmail.com