Curriculum Vitae

Personal Information:

Name: Moataz Mostafa Ali Elkhateeb

(M. M. Elkhateeb)

Affiliation: Faculty of Science, Assiut University, Assiut, Egypt

Current Position: Assistant Professor of Mathematics

(PhD. of Quantum Information)

Degree: PhD. of Mathematics (Quantum Information) [2020]

Nationality: Egyptian

Date of Birth: 14th of December,1988

Place of Birth: Assiut, Egypt

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Research Information:

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Scopus ID: **57215597299**

Research ID: AAG-5090-2020

Education:
1. Bachelor of Science (Mathematics) Assiut University, Egypt, 2006-2009.
2. Master of Science (Scientific Computing), Assiut University, Egypt, 2010-2016.
3. Ph. D. of Mathematics (Quantum Mechanics), Assiut University, Egypt, 2016-2022

Conferences:
1. The International Conference on Pure and Applied Sciences, Luxor, Egypt, March 28-30, 2015.
2. The One Day Conference in Mathematics, Faculty of Science, Assiut University, April 14, 2016.
3. The 7th International Conference on Mathematics and Information Sciences, Faculty of Science, Suhag University, February15-17, 2018.
4. The 8th International Conference on Mathematics and Information Sciences, Cairo, February 8-10, 2019.
5. The 9th International Conference on Mathematics and Information Sciences, Faculty of Science, Aswan, February 6-8, 2020.

Top Skills:

- Research skills
- Interactive Presentations
- Teaching Mathematics and Programming
- Higher Mathematical Education
- Programming with MATLAB
- Write on Winedit, and Word

Contribution to teaching the following courses:
- Quantum Mechanics, Quantum Optics, Analysis Mechanics, Applied Mathematics.
- Algebra (Introductory), Linear Algebra.
- Calculus, Advanced Calculus, Differential Equations (Ordinary and Partial).
- Analytical Geometry (Planar and Solid), Special Functions, Fourier, and Laplace transformations.
- Computer Science and Programming Languages (Fortran, MATLAB Programs).

Related Professional Experience
➢ Attained and satisfactorily completed the following training programs organized by the FLDC (Faculty and leadership development center) (http://www.fldp.aun.edu.eg):

1. Student Evaluation, May 14-16, 2011.
2. Analytical and Creative Thinking, June 9-10, 2015.
3. Strategic Planning, June 13-14, 2015.
4. Research Ethics, September 1-2, 2015.
5. International Publishing of Research, September 1-2, 2015.
6. Communication Skills, September 20-21, 2015.
7. How to Activate the E-course, Marsh 1-3, 2018.
8. Conference Organization, December 30-31, 2018.
9. Statistical Analysis in Scientific Research, January 8-9, 2019.
10. Credit Hour System, June 7-9, 2020.
11. Code of Ethics, June 7-9, 2020.
12. Publication of research in international journals, June 28-30, 2020.

Field of Interest
- Interaction between atomic system with some states of light.
- Influence of noise on quantum coherence and entanglement generation in quantum information
- Study of the dynamics of these real physical models with presence of quantum dissipation is an open point.
- The effect of the dissipation on the systems which have multi-level qubit.
- The effect of the dissipation on the systems which have multi two-level qubits.
- Quantum information and computation.

References:
1- Prof. Abdel-Shafy F. Obada
- Faculty of Science, Al-Azhar University (Cairo)
- Manchester Univ. UK 1994 D. Sc. - UMIST, Manchester, UK 1964-7 Ph.D. (Maths)
- Email: obada@mailer.scu.eun.eg or obada75@hotmail.com
2- Prof. Abdel-Baset Abdel-Hameed Mohamed
- Faculty of Science, Assiut University, Assiut, Egypt Ph.D. (Maths)
- Email: abdelbastm@yahoo.com
3- Prof. Mahmoud M. Abdel-Aty
- Faculty of Science, Sohag University, 82524 Sohag, Egypt - D. Sc. And Ph.D. (Maths)
- Email: abdelatyquantum@gmail.com or abdelatyquant@yahoo.co.uk

Publication:
➤ **International Refereed Journals:**

1. A.-S. F. Obada, A.-B.A. Mohamed, M. Hashem, and **M.M. Elkhateeb**, "Generating non-classical correlations between two superconductor qubits confined in a transmission cavity in dispersive limit under intrinsic noise", *Physica E: Low-dimensional Systems and Nanostructures* **117, 113854 (2020).**

2. A.-S. F. Obada, A.-B.A. Mohamed, M. Hashem, and **M.M. Elkhateeb**, "Trace distance discord and Bell-function correlations beyond entanglement in two SC-qubits interacting with a dissipative SC-cavity"**, *Laser Phys.* 30, 055203 (2020).**

3. A.-S. F. Obada, A.-B.A. Mohamed, M. Hashem, and **M.M. Elkhateeb**, "Dynamics of quantum coherence and entanglement in an intrinsic noise model of a V-type qutrit system interacting with a coherent field"**, *Physica Scripta* 95, 085101 (2020).**

4. Abdel-Baset A. Mohamed, Mostafa Hashem, **Moataz M. Elkhateeb**, and Abdel-Shafy F. Obada, "Generating non-locality correlation via 2-photon resonant interaction of dissipative two-qubit system with coherent field"**, *The European Physical Journal* D 74, 130 (2020).**

5. A.-B.A. Mohamed, **M. M. Elkhateeb**, M. Hashem, A.-S.F. Obada and H. Eleuch, "Quantum dynamics of a qutrit in a cavity filled with Kerr-like medium and intrinsic noise", **Modern Physics Letters A 2050287 (2020).**

6. Abdel-Baset A. Mohamed, **Moataz M. Elkhateeb**, Mostafa Hashem, and Abdel-Shafy F. Obada, "Intrinsic decoherence effect on dynamics of a Lambda-type qutrit interacting nonlinearly with a coherent field", *AEJ - Alexandria Engineering Journal* **61, 2348 (2022).**