



Ahmad Albadawi C.V.



CURRICULUM VITAE

Ahmad Albadawi



PERSONAL

<i>Place of Birth</i>	Jordan
<i>Date of Birth</i>	November 11, 1969
<i>Marital Status</i>	Married
<i>Nationality</i>	Jordanian
<i>Work Address</i>	Department of Physics, College of Science, Al-Hussein Bin Talal University, Ma'an, Jordan. Phone: +962-3-2179000, E-mail: ahmadbadawi@ahu.edu.jo
<i>Academic Rank (date)</i>	Professor (2019)
<i>Permanent Address</i>	Amman, Jordan. Cell Phone: +962-799426675, E-mail: ahmadalbadawi@hotmail.com

ACADEMIC QUALIFICATIONS

1986-1987	Graduated from High School with an average of 82.8 % in Jordan.
1987-1988	Intensive English courses at the preparatory school of Eastern Mediterranean University (EMU).
1988-1992	Graduated from EMU with the degree of B.Sc. in physics (minor Electronics). My CGPA was 3.27 where I was ranked as the first among all graduates from the faculty of Arts and Science in that academic year.
1992-1994	Graduated from EMU with the degree of M.Sc. in Physics. My thesis was "Particle wave collision in General Relativity (GR)". My CGPA was 3.81, out of possible four in three semesters.
1994-1998	Graduated from EMU with the degree of Ph.D. in Physics. My thesis was "Mass in a Uniform Electric Field and Energy Amplification in General Relativity".



SPECIALTY _____

General Specialization: Physics

Specialization : Theoretical (General Relativity, Mathematical Physics)

CAREER HISTORY _____

Professor ship	AL-Hussein Bin Talal University	2018- Present
Associate Prof.	AL-Hussein Bin Talal University	2015- 2017
Associate Prof.	University of Hail (Saudi Arabia)	2010- 2015
Associate Prof.	AL-Hussein Bin Talal University	2006- 2010
Assistant Prof.	AL-Hussein Bin Talal University	2004- 2006
Assistant Prof.	Applied Science University	2002- 2004
Assistant Prof.	Cyprus International University (CIU)	2000-2002
Phys.& Math Instructor	Philadelphia School (Jordan)	1999- 2000
Research Assistant (Ph.D.)	Physics Department (EMU)	1994- 1998
Research Assistant (M.S.)	Physics Department (EMU)	1992-1994

ADMINISTRATIVE EXPERIENCE _____

2010-2015: Physical Sciences Director in the preparatory year in Hail University.

2005-2006: Head of Physics Department in AHU.

2003-2004: Head of Physics Department in ASU.

2000-2001: Acting Director of the Vocational School in CIU.

2001- 2002: Elected Senate Committee Member in CIU.

2000-2002: Freshman students Adviser.

2002-2005: Coordinator for General Physics

HONORS, SCHOLARSHIPS, AWARDS AND GRANTS _____

Academic scholarship from EMU.

Assistantship for M.Sc. from EMU.

Assistantship for Ph.D. from EMU.



RESEARCH INTEREST

- General Relativity.
- Colliding Waves.
- New Solutions in the Einstein's Theory.
- Black Holes and Wormholes.

PUBLICATIONS

Peer-reviewed journal articles

- 1- A. Al-Badawi, S Kanzi and I Sakalli, Eur. Phys. J. Plus (2020) 135: 219. "Effect of quintessence on geodesics and Hawking radiation of Schwarzschild black hole".
- 2- A. Al-Badawi, I Sakalli and S Kanzi, Annals of Physics Vol. **412** (2020) 168026. "Solution of Dirac equation and greybody radiation around a regular Bardeen black hole surrounded by quintessence".
- 3- M .Q. Owaidat, A. Al-Badawi, and M. Abu-Samak, Eur. Phys. J. Plus (2018) **133**: 199 "The two-point resistance on the diamond cubic lattice".
- 4- A. Al-Badawi, General Relativity and Gravitation (2018) **50**: 16" Behavior of a spin-1/2 massive charged particle in Schwarzschild immersed in an electromagnetic universe".
- 5- M .Q. Owaidat, A. Al-Badawi, J. H. Asad and Mohammed Al-Twiessi, Chinese Physics Letters Vol. 35, No. 2 (2018) 020502 " Two-Point Resistance on the Centered Triangular Lattice".
- 6- A. Al-Badawi and I Sakalli, International Journal of Geometric Methods in Modern Physics Vol. **15** (2018) 1850051. "Dirac and Klein–Gordon–Fock equations in Grumiller's spacetime"
- 7- A. Al-Badawi and M .Q. Owaidat and S. Tarawneh, International Journal of Modern Physics D Vol. **26** (2017) 1750169. "The geodesics structure of Schwarzschild black hole immersed in an electromagnetic universe".
- 8- A. Al-Badawi and M .Q. Owaidat, General Relativity and Gravitation (2017) **49**:110." The Dirac equation in Schwarzschild black hole coupled to a stationary electromagnetic field".
- 9- A. Al-Badawi and M.K.Abu Shayeb Canadian Journal of Physics **88**, 553 (2010)" Charged Dirac particle crossing a gravitational electromagnetic sandwich wave".
- 10- A. Al-Badawi, Physics Letters B 683 (2010) 50-54" The exact behavior of electromagnetic Faraday rotation in crossing a gravitational sandwich wave in General



Relativity”.

- 11- I. Sakalli and A. Al-Badawi, Canadian Journal of Physics/Rev. can. phys. **87 (4)**,349 (2009). “ Exact solutions to a massive charged scalar field equation in the magnetically charged stringy black-hole geometry and Hawking radiation”.
- 12- A. Al-Badawi and I Sakalli, Journal of Mathematical Physics **49**, 052501 (2008) “ Solution of the Dirac equation in the rotating Bertotti-Robinson Spacetime”.
- 13- A. Al-Badawi, International Journal of Theoretical Physics, Vol. 46, N 6 1466-1470. “Exact solution of a test particle in presence of a thick domain walls” (2007).
- 14- A. Al-Badawi and M Halilsoy, General Relativity and Gravitation, Vol. 38, N12 1729 “ On the physical meaning of the NUT parameter” December (2006).
- 15- M.K.Abu Shayeb and A. Al-Badawi, Hadronic Journal Vol. 29, N6 651(2006) “ Systematic studies of photon production in Heavy-Ion Interactions”.
- 16- A. Al-Badawi and M Halilsoy, IL Nuovo Cimento 119 B, N.10 931(2004) ” Revisiting the rotating Bertotti-Robinson electromagnetic universe”.
- 17- A Al-Badawi and M Halilsoy, IL Nuovo Cimento 114 B 235(1999) “ Interaction of successive electromagnetic waves in General Relativity”.
Note: This paper is mentioned in the famous book By Stephani et al “Exact Solutions of Einstein’s Field Equations” 2^{ed} Edition, Cambridge University Press see §25.5.
- 16- A. Al-Badawi and M Halilsoy, IL Nuovo Cimento 114 B 21(1999) “ Energy amplification across sandwich waves in General Relativity”.
- 17- M Halisoy and A. Al-Badawi, IL Nuovo Cimento 113 B 761(1998) “ Modified Reissnar-Nordstrom metric in an external electrostatic field”.
Note: This paper is mentioned in the famous book By Stephani et al “Exact Solutions of Einstein’s Field Equations” 2^{ed} Edition, Cambridge University Press, see §21.2.
- 18- M Halisoy and A. Al-Badawi, Classical Quantum Gravity 12 (1995) 3013-3017 “ Metric for a static mass coupled to a stationary electromagnetic field”.

Patents

- N.A.



CONFERENCES AND PROCEEDINGS

- 1- XVIII SIGRAV Conference, Cosenza, Italy, September 22-25, 2008.
- 2- NEB14-Recent Developments in Gravity, Ioannina, Greece, June 8-11, 2010.
- 3- First Hermann Minkowski meeting, Albena, Bulgaria, May 15-18, 2017.
- 4- Physics Days Meeting, Eastern Mediterranean University, Cyprus, March 21-22, 2019

TEACHING

Courses Taught-undergraduate

Mathematical Physics I & II, Electromagnetic I & II, Classical Mechanics I & II, Introduction to General Relativity, Modern physics, Quantum physics I & II, General Physics 101, General Physics 102, Calculus I, Calculus II, Differential Equation, Electronic, Digital Electronics, Thermodynamics, Circuits and Signals, Heat and Waves. Medical Physics.

Courses Taught-postgraduate

Electromagnetic, Special topics

SKILLS

Languages

- Arabic (native)
- English (excellent)

Computer Programs

- Familiar with major software. (MATHEMATICA).
- ICDL (Mutah University)