Prof. FEVZİYE YAŞUK

Personal Information

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Education Information

Doctorate, Erciyes University, Fen Bil. Enst., Fizik/Yüksek Enerji Ve Plazma Fiziği, Turkey 1996 - 2003
Postgraduate, Erciyes University, Fen Bil. Enst., Fizik/Yüksek Enerji Ve Plazma Fiziği, Turkey 1993 - 1995
Undergraduate, Erciyes University, Fen-Edebiyat Fakültesi, Fizik, Turkey 1989 - 1993

Foreign Languages

English, B2 Upper Intermediate

Certificates, Courses and Trainings

Foreign Language, Doktora İngilizce Hazırlık, Orta Doğu Teknik Üniversitesi / Yabancı Diller Okulu, 1996

Dissertations

Doctorate, Beş Boyutlu Uzayda Relativistik Spinli İki Parçacık Problemi, Erciyes Üniversitesi, Fen Bilimleri Enstitüsü, Fizik/Yüksek Enerji Ve Plazma Fiziği, 2003
Postgraduate, Çiftlenimli Relativistik Harmonik Osilatör, Erciyes Üniversitesi, Fen Bilimleri Enstitüsü, Fizik/Yüksek Enerji Ve Plazma Fiziği, 1995

Research Areas

Basic Sciences, Physics, General Physics, Mathematical Methods in Physics, Relativity and Gravitation, Condensed Matter 1: Structural, Mechanical and Thermal Properties, Quantum fluids and solids

Academic Titles / Tasks

Professor, Erciyes University, Fen Fakültesi, Fizik, 2013 - Continues
Associate Professor, Erciyes University, Fen Fakültesi, Fizik, 2008 - 2013
Assistant Professor, Erciyes University, Fen Fakültesi, Fizik, 2003 - 2008

Research Assistant, Erciyes University, Fen Fakültesi, Fizik, 1994 - 2003

Academic and Administrative Experience

Erciyes Üniversitesi, 2013 - Continues
Erciyes University, 2013 - Continues
Erciyes Üniversitesi, 2008 - 2010
Erciyes University, 2008 - 2010

Courses

Fizikte Matematik Metodlar I, Undergraduate, 2011 - 2012, 2009 - 2010
Fizik ve Ekonomi, Undergraduate, 2012 - 2013, 2011 - 2012
Fizik II (Matematik), Undergraduate, 2011 - 2012, 2010 - 2011, 2008 - 2009
Fizik I (Makina), Undergraduate, 2012 - 2013
Klasik Mekanik, Undergraduate, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009
Fizikte Matematik Metodlar I, Postgraduate, 2012 - 2013
Klasik Mekanik II, Postgraduate, 2011 - 2012, 2010 - 2011, 2008 - 2009
Fizik İçin Diferansiyel Denklemler, Undergraduate, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010
Relativistik Kuantum Mekaniği II, Doctorate, 2011 - 2012, 2010 - 2011, 2009 - 2010
Relativistik Kuantum Mekaniği I, Doctorate, 2012 - 2013, 2010 - 2011, 2009 - 2010
Fizik I (Matematik), Undergraduate, 2011 - 2012
Parçacık Fiziğine Giriş, Undergraduate, 2010 - 2011, 2009 - 2010
Relativistik Kuantum Mekaniği, Doctorate, 2011 - 2012
Fizik II (Gıda), Undergraduate, 2010 - 2011
Klasik Mekanik I, Postgraduate, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009
Fizik I (İnşaat), Undergraduate, 2010 - 2011
Fizik I (Matematik), Undergraduate, 2010 - 2011
Fizik II (Kimya), Undergraduate, 2009 - 2010
Teknolojinin Bilimsel İlkeleri, Associate Degree, 2009 - 2010, 2008 - 2009
Fizik I (Sivil Havacılık), Undergraduate, 2009 - 2010, 2008 - 2009
Fizik İçin Diferansiyel Denklemler, Undergraduate, 2008 - 2009
Fizikte Matematik Metodlar II, Doctorate, 2008 - 2009
Fizik İçin Diferansiyel Denklemler(II.Ö), Undergraduate, 2008 - 2009

Advising Theses

YAŞUK F., Değişken Kütleli Relativistik Dalga Denklemlerinin ÇÖzümü, Postgraduate, Ö.Durusu(Student), 2011
YAŞUK F., Değişken Kütleli Relativistik Olmayan ve Relativistik Dalga denklemlerinin Analitik olarak Çözümlenmesi, Postgraduate, S.Tekin(Student), 2008

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Ansatz approach solution of the Duffin-Kemmer-Petiau equation for spin-1 particles with position-dependent mass in the presence of Kratzer-type potential**
Bahar M. K., YAŞUK F.
CANADIAN JOURNAL OF PHYSICS, vol.92, no.12, pp.1565-1569, 2014 (SCI-Expanded)
II. **Relativistic solutions for the spin-1 particles in the two-dimensional Smorodinsky-Winternitz**

potential
Bahar M. K., YAŞUK F.
ANNALS OF PHYSICS, vol.344, pp.105-117, 2014 (SCI-Expanded)

III. **Solutions of the Duffin-Kemmer-Petiau equation in the presence of Hulthen potential in (1+2) dimensions for unity spin particles using the asymptotic iteration method**
Molaee Z., Bahar M. K., YAŞUK F., Hassanabadi H.
CHINESE PHYSICS B, vol.22, no.6, 2013 (SCI-Expanded)

IV. **Relativistic spin-1 particles with position-dependent mass under the Coulomb interaction: Exact analytical solutions of the DKP equation**
Bahar M. K., YAŞUK F.
CANADIAN JOURNAL OF PHYSICS, vol.91, no.3, pp.191-197, 2013 (SCI-Expanded)

V. **Fermionic particles with position-dependent mass in the presence of inversely quadratic Yukawa potential and tensor interaction**
Bahar M. K., YAŞUK F.
PRAMANA-JOURNAL OF PHYSICS, vol.80, no.2, pp.187-197, 2013 (SCI-Expanded)

VI. **Bound states of the Dirac equation with position-dependent mass for the Eckart potential**
Bahar M. K., YAŞUK F.
CHINESE PHYSICS B, vol.22, no.1, 2013 (SCI-Expanded)

VII. **Exact Solutions of the Mass-Dependent Klein-Gordon Equation with the Vector Quark-Antiquark Interaction and Harmonic Oscillator Potential**
Bahar M. K., YAŞUK F.
ADVANCES IN HIGH ENERGY PHYSICS, 2013 (SCI-Expanded)

VIII. **The Dirac Equation with position-dependent mass for the modified Pöschl-Teller potential and its solution**
YAŞUK F., BAHAR M. K.
INTERNATIONAL JOURNAL OF PHYSICAL SCIENCES, vol.7, no.45, pp.5954-5964, 2012 (SCI-Expanded)

IX. **Approximate Solutions to the Dirac Equation with Effective Mass for the Manning-Rosen Potential in N Dimensions**
Bahar M. K., YAŞUK F.
FEW-BODY SYSTEMS, vol.53, pp.515-524, 2012 (SCI-Expanded)

X. **Approximate solutions of the Dirac equation with position-dependent mass for the Hulthen potential by the asymptotic iteration method**
YAŞUK F., Bahar M. K.
PHYSICA SCRIPTA, vol.85, no.4, 2012 (SCI-Expanded)

XI. **The relativistic Duffin-Kemmer-Petiau sextic oscillator**
YAŞUK F., Karakoç M., Boztosun I.
PHYSICA SCRIPTA, vol.78, no.4, 2008 (SCI-Expanded)

XII. **Relativistic solutions for double ring-shaped oscillator potential via asymptotic iteration method**
YAŞUK F., DURMUŞ A.
Physica Scripta, vol.77, no.1, 2008 (SCI-Expanded)

XIII. **Relativistic and nonrelativistic solutions for diatomic molecules in the presence of double ring-shaped Kratzer potential**
Durmus A., Yasuk F.
Journal of Chemical Physics, vol.126, no.7, 2007 (SCI-Expanded)

XIV. **Exact analytical solution to the relativistic Klein-Gordon equation with noncentral equal scalar and vector potentials**
Yasuk F., Durmus A., Boztosun I.
Journal of Mathematical Physics, vol.47, no.8, 2006 (SCI-Expanded)

XV. **Exact analytical solution of the Klein-gordon equation for the pionic atom by asymptotic iteration method**
Durmus A., Yasuk F., Boztosun I.

International Journal of Modern Physics E, vol.15, no.6, pp.1243-1251, 2006 (SCI-Expanded)

XVI. **Comparative study of the multiquadric and thin-plate spline radial basis functions for the transient-convective diffusion problems**
Durmus A., Boztosun I., Yasuk F.
International Journal of Modern Physics C, vol.17, no.8, pp.1151-1169, 2006 (SCI-Expanded)

XVII. **Asymptotic iteration method solutions to the relativistic Duffin-Kemmer-Petiau equation**
Boztosun I., Karakoç M., Yasuk F., Durmus A.
Journal of Mathematical Physics, vol.47, no.6, 2006 (SCI-Expanded)

XVIII. **Exact solutions of the Schrodinger equation with non-central potential by the Nikiforov-Uvarov method**
Yasuk F., Berkdemir C., Berkdemir A.
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL, vol.38, no.29, pp.6579-6586, 2005 (SCI-Expanded)

XIX. **Exact solutions of the Duffin-Kemmer-Petiau equation for the deformed Hulthen potential**
Yasuk F., Berkdemir C., Berkdemir A., Onem C.
PHYSICA SCRIPTA, vol.71, no.4, pp.340-343, 2005 (SCI-Expanded)

XX. **The gK(0)(*)K pi coupling constant in QCD**
Aliev T. M., Savcı M., Yasuk F.
ACTA PHYSICA POLONICA B, vol.32, no.1, pp.65-74, 2001 (SCI-Expanded)

Articles Published in Other Journals

I. **The Period of Coupled Relativitistic Harmonic Oscillator**
YAŞUK F., ÖNEM Ş. C.
Balkan Physics Letters, vol.11, no.2, pp.72-76, 2003 (Peer-Reviewed Journal)

Books & Book Chapters

I. **Elektrik ve Magnetizma Laboratuvarı Deneyleri**
SAATÇİ B., TÜRKTEKİN S., Belenli İ., YAŞUK F.
Erciyes Üniversitesi Yayınları No:141, Kayseri, 2003

II. **Optik ve Dalgalar Laboratuarı**
ÖNEM Ş. C., ARI M., KIŞ M., ERDİNÇ A., YAŞUK F., KEŞLİOĞLU K., KARAASLAN T.
Erciyes Üniversitesi Yayınları No:133, Kayseri, 2002

III. **Optik ve Dalgalar Laboratuarı Kitabı**
ÖNEM Ş. C., ARI M., KIŞ M., YAŞUK F., ERDİNÇ A., KEŞLİOĞLU K.
Erciyes Üniversitesi Yayınları No: 133, Kayseri, 2002

Refereed Congress / Symposium Publications in Proceedings

I. **The Relativistic Spin Zero Particles with Position Dependent Mass In The Inversely Quadratic Yukawa Potential**
YAŞUK F., Bahar M. K.
Turkish Physical Society 30Th International Physics Congress, İstanbul, Turkey, 2 - 05 September 2013, pp.640

II. **Investigation By Perturbative And Asymptotic Iteration Method Of A Linear Oscillator Under Electric Field**
YAŞUK F., Bahar M. K.
Turkish Physical Society 28 th International Physical Congress, Turkey, 1 - 04 September 2011, pp.922

III. **Exact Analytical Solutions Of The DKP Eqaution With Spatially Dependent Mass**

Durusu Ö., YAŞUK F.
Turkish Physical Society 27 th International Physical Congress, Turkey, 1 - 04 September 2010, pp.798

IV. **Asymptotic Iteration Method Solutions To The Klein-Gordon Equation With Position-Dependent Mass**
Kesim M. M., Tekin S., YAŞUK F.
Turkish Physical Society 27 th International Physical Congress, Turkey, 1 - 04 September 2010, pp.805

V. **Asymptotic Iteration Method Solutions To The D-Dimensional Schrödinger Equation With Position-Dependent Mass**
YAŞUK F., Tekin S., Boztosun I.
Turkish Physical Society 26 th International Physical Congress, Turkey, 1 - 04 September 2009, pp.278

VI. **Relativistic Solutions for Double Ring Shaped Oscillator**
YAŞUK F., DURMUŞ A.
25th International Physics Congress, Muğla, Turkey, 25 - 29 August 2008, pp.297-0

VII. **Relativistic Treatment of Spinless Particles Interacting of Pseudoharmonic Potential**
DURMUŞ A., YAŞUK F.
25th International Physics Congress, 25 - 29 August 2008

VIII. **Relativistic treatment of spinless particles interacting with pseudoharmonic potential**
DURMUŞ A., YAŞUK F.
Turkish Physical Society 25 th International Physical Congress, Turkey, 1 - 04 August 2008, pp.563

IX. **Exact Analytical Solutions of the Klein-Gordon Equation for the Pionic Atom in Coulomb Field**
DURMUŞ A., YAŞUK F.
24th International Physics Congress, Malatya, Turkey, 28 - 31 August 2007, pp.668-0

X. **Exact Analytical Solutions to the Relativistic Duffin Kemer Petiau Equation**
DURMUŞ A., YAŞUK F., Boztosun I.
6th International Conference of the Balkan Physical Union, İstanbul, Turkey, 22 - 26 August 2006, pp.347-0

XI. **Perturbative approach witin the framework of the asymptotic iteration method for the Duffin-Kemmer-Petiau Equation**
YAŞUK F., Karakoç M., DURMUŞ A., Boztosun I.
6 th International Conference of the Balkan Physics Union, Turkey, 1 - 04 August 2006, pp.353

XII. **Numerical comparisons of multiquadric and thin-plate spline radial basis functions for 1-D transient-convective diffusion equation**
DURMUŞ A., YAŞUK F., Boztosun I.
6 th International Conference of the Balkan Physics Union, Turkey, 1 - 04 August 2006, pp.358

XIII. **Exact solutions to the relativistic Duffin-Kemmer-Petiau equation**
DURMUŞ A., YAŞUK F., Boztosun I.
6 th International Conference of the Balkan Physics Union, Turkey, 1 - 04 August 2006, pp.347

XIV. **Multiquadric radial basis function for 2-D transient-convective diffusion equation**
DURMUŞ A., YAŞUK F., Boztosun I.
" 6 th International Conference of the Balkan Physics Union, Turkey, 1 - 04 August 2006, pp.955

XV. **Perturbative Approach within the framework of the Asymptotic Iteration Method for the Duffin Kemmer Petiau equation**
YAŞUK F., KARAKOÇ M., DURMUŞ A., BOZTOSUN İ.
6th International Conference of the Balkan Physical Union, 22 - 26 June 2006

XVI. **Exact solutions for Hartmann potential by using Nikiforov-Uvarov method**
YAŞUK F., Berkdemir C., Berkdemir A.
23 th International Physics Congress, Turkey, 1 - 04 September 2005, pp.362

XVII. **Applications of the Duffin-Kemmer-Petiau Equation for deformed Wood-Saxon potential in nuclear physics**
YAŞUK F., Berkdemir C., Berkdemir A.
3 th Eurasian Conference Nuclear Scince and Its Application, Uzbekistan, 1 - 04 October 2004, pp.115-116

XVIII. **Beş Boyutlu Uzayda Relativistik Spinli Tek ve İki Parçacık Problemi**
YAŞUK F., Ünal N., ÖNEM Ş. C.

Türk Fizik Derneği 22. Fizik Kongresi, Muğla, Turkey, 1 - 04 September 2004, pp.297

Supported Projects

YAŞUK F., KESİM M., DURUSU Ö., BAHAR M. K., Project Supported by Higher Education Institutions, NON-RELATİVİSTİK VE RELATİVİSTİK KONUMA BAĞLI DEĞİŞKEN KÜTLELİ DALGA DENKLEMLERİNİN FARKLI POTANSİYEL VE FARKLI KÜTLE DAĞILIMLARI İÇİN ANALİTİK ÇÖZÜMLERİNİN ARAŞTIRILMASI, 2009 - 2013
BOZTOSUN I., YAŞUK F., ÖNEM Ş. C., Project Supported by Higher Education Institutions, RELATİVİSTİK DUFFİN-KEMMER-PETİAU DENKLEMİNİN KULLANILMASIYLA SPİN-0 VE SPİN-1 HADRONLARIN ÇEŞİTLİ ETKİLEŞİMLERİNİ, 2004 - 2008

Scientific Refereeing

Canadian Journal Of Physics, Journal Indexed in SSCI, July 2012
Pramana - J. Phys., Journal Indexed in SSCI, June 2012
Journal Of Physics A: Math and Theoretical, Journal Indexed in SSCI, November 2011
Few Body Systems, Journal Indexed in SSCI, October 2011
Central European Journal of Physics, Journal Indexed in SSCI, September 2011
Physica Scripta, Journal Indexed in SSCI, February 2011
Central European Journal of Physics, Journal Indexed in SSCI, October 2009
Journal Of Mathematical Physics, Journal Indexed in SSCI, March 2008

Metrics

Publication: 42
Citation (WoS): 514
Citation (Scopus): 288
H-Index (WoS): 10
H-Index (Scopus): 6

Congress and Symposium Activities

Turkish Physical Society 29 th International Physical Congress, Attendee, Turkey, 2012
Turkish Physical Society 28 th International Physical Congress, Attendee, Turkey, 2011
Turkish Physical Society 27 th International Physical Congress, Attendee, Turkey, 2010
Turkish Physical Society 26 th International Physical Congress, Attendee, Bodrum, Turkey, 2009
Turkish Physical Society 25 th International Physical Congress, Attendee, Bodrum, Turkey, 2008
Turkish Physical Society 24 th International Physics Congress, Attendee, Malatya, Turkey, 2007
6 th International Conference of the Balkan Physics Union, Attendee, İstanbul, Turkey, 2006
Summer School III on Nuclear Collective Dynamics, Attendee, İstanbul, Turkey, 2006
Turkish Physical Society 23 th International Physics Congress, Attendee, Muğla, Turkey, 2005
3 th Eurasian Conference Nuclear Scince and Its Application, Attendee, Tashkent, Uzbekistan, 2004
Summer School II on Nuclear Collective Dynamics, Attendee, İstanbul, Turkey, 2004
Summer School on Particle Physics, Attendee, Trieste, Italy, 2004