

## Prof. Sehan KARTAL

### Personal Information

Office Phone: [+90 212 455 5700](tel:+902124555700) Extension: 15254

Office Phone: [+90 212 455 5846](tel:+902124555846)

Fax Phone: [+90 212 455 5855](tel:+902124555855)

Email: [sehban@istanbul.edu.tr](mailto:sehban@istanbul.edu.tr)

Web: <http://aves.istanbul.edu.tr/sehban/>

Address: İ.Ü. Fen Fakültesi Fizik Bölümü Yüksek Enerji ve Plazma Fiziği A.B.D. Vezneciler-Beyazıt İstanbul



### International Researcher IDs

ORCID: 0000-0002-0491-4219

Publons / Web Of Science ResearcherID: K-9252-2015

ScopusID: 8400336200

Yoksis Researcher ID: 5954

### Education Information

Doctorate, Istanbul University, Faculty Of Science, Department Of Physics, Turkey 1990 - 1996

Postgraduate, Istanbul University, Faculty Of Science, Department Of Physics, Turkey 1987 - 1990

Undergraduate, Istanbul University, Faculty Of Science, Fizik, Turkey 1982 - 1987

### Foreign Languages

Italian, B1 Intermediate

English, B2 Upper Intermediate

### Dissertations

Doctorate, Balkanlar Üzerindeki İyonosferde Toplam Elektron Yoğunluğu Modeli, Istanbul University, Faculty of Science, Fizik, 1996

Postgraduate, Ergimiş Sıvı Metallerin Fiziksel Özellikleri , Istanbul University, Faculty of Science, Fizik, 1990

### Research Areas

Health Sciences, Physics, Basic Particles and Areas, Special reactions and phenomonology, Natural Sciences, Engineering and Technology

### Academic Titles / Tasks

Professor, Istanbul University, Faculty of Science, Department of Physics, 2011 - Continues

## Academic and Administrative Experience

Head of Department, Istanbul University, Faculty Of Science, Department Of Physics, 2020 - Continues

## Courses

Applications of Physics in Different Disciplines, Undergraduate, 2021 - 2022  
The Physics of Particle Detectors, Doctorate, 2021 - 2022  
Deneysel Parçacık Fiziği I, Postgraduate, 2021 - 2022  
Computing in Anthropology I, Undergraduate, 2018 - 2019  
High Energy Accelerator Physics, Undergraduate, 2018 - 2019, 2015 - 2016  
Temel Tanecikler I, Undergraduate, 2018 - 2019  
Experimental Particle Physics I, Postgraduate, 2018 - 2019, 2015 - 2016  
The Physics of Particle Detectors, Doctorate, 2018 - 2019  
Hadron Colliders at Particle Physics, Doctorate, 2018 - 2019, 2015 - 2016  
Deneysel Parçacık Fiziği II, Postgraduate, 2015 - 2016  
Parçacık Dedektörlerinin Fiziği, Doctorate, 2015 - 2016  
İleri Fizik Uygulamaları Ö.Ö, Undergraduate, 2015 - 2016  
Teorik Fizikte Seçme Konular, Undergraduate, 2013 - 2014  
Teorik Fizikte Seçme Konular (İ.Ö.), Undergraduate, 2013 - 2014  
Bilim ve Kültür Mirası, Postgraduate, 2012 - 2013  
Deneysel Parçacık Fiziği II, Postgraduate, 2012 - 2013  
Parçacık Dedektörlerinin Fiziği, Doctorate, 2012 - 2013  
Yüksek Enerji Hızlandırıcıları Fiziği, Undergraduate, 2012 - 2013  
Deneysel Parçacık Fiziği I, Postgraduate, 2012 - 2013  
Parçacık Fiziğinde Hadron Çarpıştırıcıları, Doctorate, 2012 - 2013  
Antropolojide Bilgi İşlem I, Undergraduate, 2012 - 2013  
İleri Fizik Uygulamaları, Undergraduate, 2012 - 2013, 2011 - 2012, 2010 - 2011  
Antropolojide Bilgi İşlem II, Undergraduate, 2012 - 2013  
Genel Fizik Lab. III , Undergraduate, 2010 - 2011  
Fizikte Özel Konular, Undergraduate, 2010 - 2011  
Elementary Particle Physics, Undergraduate, 2009 - 2010, 2007 - 2008, 2006 - 2007, 2005 - 2006, 2004 - 2005  
Fizik IV, Undergraduate, 2004 - 2005  
Fizik I, Undergraduate, 2001 - 2002

## Advising Theses

KARTAL S., R-Parite İhlal eden skaler Lepton etkileşmelerinin Geleceğin Dairesel Çarpıştırıcılarında Araştırılması, Postgraduate, Y.Emre(Student), 2018  
Kartal S., Geleceğin Dairesel Çarpıştırıcılarında 100 TeV'de Lepton+ Jetlerin Ölçülmesi, Postgraduate, G.Halimoğlu(Student), 2018  
KARTAL S., Lisans Öğrencilerinin Parçacık Fiziği Kavramlarını Anlama Düzeyleri ve Kavram Yanılgıları, Postgraduate, N.Munk(Student), 2018  
KARTAL S., Tungusten Trioksit İnce Filimlerde Lateral Difüzyon, Postgraduate, N.Arapoğlu(Student), 2016  
KARTAL S., Restorasyon ve Konservasyon Laboratuvarlarının Koruma Politikalarındaki Rolü, Postgraduate, D.Demir(Student), 2015  
KARTAL S., Moleküller arası Polielektrolitlerin Sulu Çözeltilerindeki yapıların Etkilerinin İncelenmesi, Doctorate, S.Uçar(Student), 2015  
KARTAL S., Tasarım Müzeleri Yönetim Modelleri, Türkiye'de bir tasarım müzesi için yol planı ve öneriler, Postgraduate,

B.Gün(Student), 2015

KARTAL S., Farklı Süpersimetrik Modeller ve Diğer Bazı Yeni Fizik Yaklaşımlarında Hadronik Çeşni Değiştiren Yüksüz Akım Geçişlerinin Fenomenolojisi, Doctorate, A.Tuğba(Student), 2014

KARTAL S., Evrensel Ekstra Boyut ve Diğer Bazı Yeni Fizik Senaryolarında Hadronik Çeşni Değiştiren Yüksüz Akım Geçişlerinin Araştırılması, Doctorate, Z.Tavukoğlu(Student), 2014

KARTAL S., Standart ve süpersimetrik Modellerde Bazı Bc Bozunum Kanallarının incelenmesi, Postgraduate, Y.Erkuzu(Student), 2012

KARTAL S., ILC'DE, STANDART MODEL VE ÖTESİNDE, CKM-BASTIRILMIŞ TOP KUARK BOZUNUMLARI, Postgraduate, Z.Tavukoğlu(Student), 2009

KARTAL S., ETKİN TEORİLERDE HIGGS DEĞİŞ-TOKUŞU ALTINDA ÇİFT ÇEŞNİLİK İHLALİ YAPAN TOP KUARK BOZUNUMLARI, Postgraduate, A.Tuğba(Student), 2009

## Jury Memberships

Associate Professor Exam, Associate Professor Exam, Istanbul University, October, 2019

Associate Professor Exam, Associate Professor Exam, Istanbul University, March, 2019

Associate Professor Exam, Associate Professor Exam, Istanbul University, October, 2018

Associate Professor Exam, Doçentlik, Doçentlik Sınavı, April, 2018

Associate Professor Exam, Doçentlik sözlü sınavı, ÜAK, September, 2014

Associate Professor Exam, Doçentlik Sözlü sınavı, YÖK, April, 2014

Associate Professor Exam, Doçentlik Eser İnceleme, YÖK, February, 2014

Associate Professor Exam, Doçentlik Eser İnceleme Jürisi, YÖK, October, 2012

Associate Professor Exam, Doçentlik Eser İnceleme Jürisi, YÖK, October, 2011

Associate Professor Exam, Doçentlik Eser İnceleme Jürisi, YÖK, October, 2011

Associate Professor Exam, Doçentlik Sınav Jürisi, YÖK, October, 2011

Associate Professor Exam, Doçentlik Sınav Jürisi, YÖK, October, 2011

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Effects of Air and Helium Cold Plasma on Sensory Acceptability and Quality of Fresh Sea Bass (*Dicentrarchus labrax*)**  
Mol S., Akan T., Kartal S., Cosansu S., Tosun Ş. Y., Üçok Alakavuk D., Ulusoy Ş., Dogruyol H., Bostan K.  
FOOD AND BIOPROCESS TECHNOLOGY, 2022 (SCI-Expanded)
- II. **A new effective potential for deuteron**  
Koohrokhi T., Kartal S.  
COMMUNICATIONS IN THEORETICAL PHYSICS, vol.74, no.7, 2022 (SCI-Expanded)
- III. **HE-LHC: The High-Energy Large Hadron Collider Future Circular Collider Conceptual Design Report Volume 4**  
Abada A., Abbrescia M., AbdusSalam S. S., Abdyukhanov I., Abelleira Fernandez J., Abramov A., Aburaia M., Acar A. O., Adzic P. R., Agrawal P., et al.  
EUROPEAN PHYSICAL JOURNAL-SPECIAL TOPICS, vol.228, no.5, pp.1109-1382, 2019 (SCI-Expanded)
- IV. **FCC-hh: The Hadron Collider: Future Circular Collider Conceptual Design Report Volume 3**  
Abada A., Abbrescia M., AbdusSalam S. S., Abdyukhanov I., Abelleira Fernandez J., Abramov A., Aburaia M., Acar A. O., Adzic P. R., Agrawal P., et al.  
EUROPEAN PHYSICAL JOURNAL-SPECIAL TOPICS, vol.228, no.4, pp.755-1107, 2019 (SCI-Expanded)
- V. **FCC Physics Opportunities: Future Circular Collider Conceptual Design Report Volume 1**  
Abada A., Abbrescia M., AbdusSalam S. S., Abdyukhanov I., Fernandez J. A., Abramov A., Aburaia M., Acar A. O., Adzic P. R., Agrawal P., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.79, no.6, 2019 (SCI-Expanded)

- VI. **FCC-ee: The Lepton Collider: Future Circular Collider Conceptual Design Report Volume 2**  
Abada A., Abbrescia M., AbdusSalam S., Abdyyukhanov I., Abelleira Fernandez J., Abramov A., Aburaia M., Acar A., Adzic P., Agrawal P., et al.  
EUROPEAN PHYSICAL JOURNAL-SPECIAL TOPICS, vol.228, no.2, pp.261-623, 2019 (SCI-Expanded)
- VII. **Investigation of the Effects of Seizures Induced with Penthylentetrazole on Biomolecular Structure in Peripheral Tissues with Fourier Transform Infrared Spectroscopy Method and Comparison with Oxidative Stress Markers**  
Uzum G., Kuruca S., Kaptan Z., Kapucu A., Dar K., Yilmaz A., Yalcinkaya O., Kartal S., Kaleler I.  
ACTA PHYSIOLOGICA, vol.221, pp.73-74, 2017 (SCI-Expanded)
- VIII. **Radiative  $\Sigma(b) \rightarrow \Sigma \gamma$  decay in SM and BSM**  
Azizi K., Kartal S., Olgun A., Tavukoglu Z.  
JOURNAL OF PHYSICS G-NUCLEAR AND PARTICLE PHYSICS, vol.41, no.9, 2014 (SCI-Expanded)
- IX. **Analysis of the semileptonic  $\Lambda(b) \rightarrow \Lambda l^{(+)}l^{(-)}$  transition in the topcolor-assisted technicolor model**  
Azizi K., Kartal S., Olgun A., Tavukoglu Z.  
PHYSICAL REVIEW D, vol.88, no.7, 2013 (SCI-Expanded)
- X. **Analysis of the radiative  $\Lambda(b) \rightarrow \Lambda(\gamma)$  transition in the standard model and scenarios with one or two universal extra dimensions**  
Azizi K., Kartal S., Olgun A., Tavukoglu Z.  
PHYSICAL REVIEW D, vol.88, no.1, 2013 (SCI-Expanded)
- XI. **Analysis of the radiative  $\Lambda_b \rightarrow \Lambda l^{(+)}l^{(-)}$  transition in SM and scenarios with one or two universal extra dimensions**  
KARTAL S.  
PHYSICAL REVIEW D, vol.D, no.88, 2013 (SCI-Expanded)
- XII. **Comparative analysis of the semileptonic  $\Lambda(b) \rightarrow \Lambda l^{(+)}l^{(-)}$  transition in SM and different SUSY scenarios using form factors from full QCD**  
Azizi K., Kartal S., Olgun A., Tavukoglu Z.  
JOURNAL OF HIGH ENERGY PHYSICS, no.10, 2012 (SCI-Expanded)
- XIII. **Comparative analysis of the semileptonic  $\Lambda_b \rightarrow \Lambda l^{(+)}l^{(-)}$  transition in SM and different SUSY scenarios using form factors from full QCD**  
KARTAL S.  
The Journal of High Energy Physics, vol.10, pp.1-16, 2012 (SCI-Expanded)
- XIV. **Constraint on compactification scale via recently observed baryonic  $\nu(b) \rightarrow \nu l^{(+)}l^{(-)}$  channel and analysis of the  $\Sigma(b) \rightarrow \Sigma l^{(+)}l^{(-)}$  transition in SM and UED scenario**  
Azizi K., Kartal S., Katirci N., Olgun A., Tavukoglu Z.  
JOURNAL OF HIGH ENERGY PHYSICS, no.5, 2012 (SCI-Expanded)
- XV. **Direct measurement of the Chudakov effect**  
Virkus T., Thomsen H. D., Uggerhoj E., Uggerhoj U. I., Ballestrero S., Sona P., Mangiarotti A., Ketel T. J., Dizdar A., Kartal S., et al.  
PHYSICAL REVIEW LETTERS, vol.100, no.16, 2008 (SCI-Expanded)
- XVI. **Measurement of the azimuthal angle distribution of leptons from W boson decays as a function of the W transverse momentum in  $p(\bar{p})$  collisions at  $\sqrt{s} = 1.8$  TeV**  
Acosta D., Affolder T., Albrow M., Ambrose D., Amidei D., Anikeev K., Antos J., Apollinari G., Arisawa T., Artikov A., et al.  
PHYSICAL REVIEW D, vol.73, no.5, 2006 (SCI-Expanded)
- XVII. **Search for W and Z bosons in the reaction  $p(\bar{p}) \rightarrow$  two jets plus  $\gamma$  at  $\sqrt{s} = 1.8$  TeV**  
Acosta D., Affolder T., Albrow M., Ambrose D., Amidei D., Anikeev K., Antos J., Apollinari G., Arisawa T., Artikov A., et al.  
PHYSICAL REVIEW D, vol.73, no.1, 2006 (SCI-Expanded)
- XVIII. **Formation length effects in very thin targets**  
UGGERHOJ U., KNUDSEN H., BALLESTRERO S., SONA P., MANGIAROTTI A., KETEL T., DIZDAR A., Kartal S.,

PAGLIARONE C.

PHYSICAL REVIEW D, vol.72, no.11, 2005 (SCI-Expanded)

- XIX. **Search for supersymmetric Higgs bosons in the di-tau decay mode in  $p(\bar{p})$  collisions at root  $s=1.8$  TeV**  
Acosta D., Affolder T., Albrow M., Ambrose D., Amidei D., Anikeev K., Antos J., Apollinari G., Arisawa T., Artikov A., et al.  
PHYSICAL REVIEW D, vol.72, no.7, 2005 (SCI-Expanded)
- XX. **K-S(0) and Lambda(0) production studies in  $p(\bar{p})$  collisions at root  $s=1800$  and  $630$  GeV**  
Acosta D., Affolder T., Albrow M., Ambrose D., Amidei D., Anikeev K., Antos J., Apollinari G., Arisawa T., Artikov A., et al.  
PHYSICAL REVIEW D, vol.72, no.5, 2005 (SCI-Expanded)
- XXI. **Measurement of the cross section for prompt diphoton production in  $p(\bar{p})$  collisions at root  $s=1.96$  TeV**  
Acosta D., Adelman J., Affolder T., Akimoto T., Albrow M., Ambrose D., Amerio S., Amidei D., Anastassov A., Anikeev K., et al.  
PHYSICAL REVIEW LETTERS, vol.95, no.2, 2005 (SCI-Expanded)
- XXII. **Search for scalar leptoquark pairs decaying to  $\nu(\bar{\nu})q(\bar{q})$  in  $p(\bar{p})$  collisions at root  $s=1.96$  TeV**  
Acosta D., Adelman J., Affolder T., Akimoto T., Albrow M., Ambrose D., Amerio S., Amidei D., Anastassov A., Anikeev K., et al.  
PHYSICAL REVIEW D, vol.71, no.11, 2005 (SCI-Expanded)
- XXIII. **Search for ZZ and ZW production in  $p(\bar{p})$  collisions at root  $s=1.96$  TeV**  
Acosta D., Adelman J., Affolder T., Akimoto T., Albrow M., Ambrose D., Amerio S., Amidei D., Anastassov A., Anikeev K., et al.  
PHYSICAL REVIEW D, vol.71, no.9, 2005 (SCI-Expanded)
- XXIV. **Measurements of bottom-antibottom azimuthal production correlations in proton-antiproton collisions at root  $s=1.8$  TeV**  
Acosta D., Affolder T., Albrow M., Ambrose D., Amidei D., Anikeev K., Antos J., Apollinari G., Arisawa T., Artikov A., et al.  
PHYSICAL REVIEW D, vol.71, no.9, 2005 (SCI-Expanded)
- XXV. **Measurement of partial widths and search for direct CP violation in D-0 meson decays to K-K+ and  $\pi(-)\pi(+)$**   
Acosta D., Affolder T., Akimoto T., Albrow M., Ambrose D., Amerio S., Amidei D., Anastassov A., Anikeev K., Annovi A., et al.  
PHYSICAL REVIEW LETTERS, vol.94, no.12, 2005 (SCI-Expanded)
- XXVI. **Measurement of the  $t(\bar{t})$  production cross section in  $p(\bar{p})$  collisions at root  $s=1.96$  TeV using kinematic fitting of b-tagged lepton plus jet events**  
Acosta D., Adelman J., Affolder T., Akimoto T., Albrow M., Ambrose D., Amerio S., Amidei D., Anastassov A., Anikeev K., et al.  
PHYSICAL REVIEW D, vol.71, no.7, 2005 (SCI-Expanded)
- XXVII. **Search for excited and exotic electrons in the  $e$  gamma decay channel in  $p(\bar{p})$  collisions at root  $s=1.96$  TeV**  
Acosta D., Adelman J., Affolder T., Akimoto T., Albrow M., Ambrose D., Amerio S., Amidei D., Anastassov A., Anikeev K., et al.  
PHYSICAL REVIEW LETTERS, vol.94, no.10, 2005 (SCI-Expanded)
- XXVIII. **Measurement of the lifetime difference between B-s mass eigenstates**  
Acosta D., Adelman J., Affolder T., Akimoto T., Albrow M., Ambrose D., Amerio S., Amidei D., Anastassov A., Anikeev K., et al.  
PHYSICAL REVIEW LETTERS, vol.94, no.10, 2005 (SCI-Expanded)
- XXIX. **First measurements of inclusive W and Z cross sections from Run II of the Fermilab Tevatron Collider**

- Acosta D., Affolder T., Akimoto T., Albrow M., Ambrose D., Amerio S., Amidei D., Anastassov A., Anikeev K., Annovi A., et al.  
PHYSICAL REVIEW LETTERS, vol.94, no.9, 2005 (SCI-Expanded)
- XXX. **Measurement of the  $t(\bar{t})$  production cross section in  $p(\bar{p})$  collisions at  $\sqrt{s}=1.96$  TeV using lepton plus jets events with secondary vertex  $b$ -tagging**  
Acosta D., Adelman J., Affolder T., Akimoto T., Albrow M., Ambrose D., Amerio S., Amidei D., Anastassov A., Anikeev K., et al.  
PHYSICAL REVIEW D, vol.71, no.5, 2005 (SCI-Expanded)
- XXXI. **Measurement of the moments of the hadronic invariant mass distribution in semileptonic B decays**  
Acosta D., Adelman J., Affolder T., Akimoto T., Albrow M., Ambrose D., Amerio S., Amidei D., Anastassov A., Anikeev K., et al.  
PHYSICAL REVIEW D, vol.71, no.5, 2005 (SCI-Expanded)
- XXXII. **Measurement of  $W$   $\gamma$  and  $Z$   $\gamma$  production in  $p(\bar{p})$  collisions at  $\sqrt{s}=1.96$  TeV**  
Acosta D., Adelman J., Affolder T., Akimoto T., Albrow M., Ambrose D., Amerio S., Amidei D., Anastassov A., Anikeev K., et al.  
PHYSICAL REVIEW LETTERS, vol.94, no.4, 2005 (SCI-Expanded)
- XXXIII. **Measurement of the  $J/\psi$  meson and  $b$ -hadron production cross sections in  $p(\bar{p})$  collisions at  $\sqrt{s}=1960$  GeV**  
Acosta D., Adelman J., Affolder T., Akimoto T., Albrow M., Ambrose D., Amerio S., Amidei D., Anastassov A., Anikeev K., et al.  
PHYSICAL REVIEW D, vol.71, no.3, 2005 (SCI-Expanded)
- XXXIV. **Search for anomalous production of diphoton events with missing transverse energy at CDF and limits on gauge-mediated supersymmetry-breaking models**  
Acosta D., Adelman J., Affolder T., Akimoto T., Albrow M., Ambrose D., Amerio S., Amidei D., Anastassov A., Anikeev K., et al.  
PHYSICAL REVIEW D, vol.71, no.3, 2005 (SCI-Expanded)
- XXXV. **Comparison of three-jet events in  $p(\bar{p})$  collisions at  $\sqrt{s}=1.8$  TeV to predictions from a next-to-leading order QCD calculation**  
Acosta D., Affolder T., Albrow M., Ambrose D., Amidei D., Anikeev K., Antos J., Apollinari G., Arisawa T., Artikov A., et al.  
PHYSICAL REVIEW D, vol.71, no.3, 2005 (SCI-Expanded)
- XXXVI. **Measurement of the  $W$  boson polarization in top decay at CDF at  $\sqrt{s}=1.8$  TeV**  
Acosta D., Affolder T., Albrow M., Ambrose D., Amidei D., Anikeev K., Antos J., Apollinari G., Arisawa T., Artikov A., et al.  
PHYSICAL REVIEW D, vol.71, no.3, 2005 (SCI-Expanded)
- XXXVII. **Search for electroweak single-top-quark production in  $p(\bar{p})$  collisions at  $\sqrt{s}=1.96$  TeV**  
Acosta D., Adelman J., Affolder T., Akimoto T., Albrow M., Ambrose D., Amerio S., Amidei D., Anastassov A., Anikeev K., et al.  
PHYSICAL REVIEW D, vol.71, no.1, 2005 (SCI-Expanded)
- XXXVIII. **Combination of CDF and D0 results on the  $W$  boson mass and width**  
Abazov V., Abbott B., Abdesselam A., Abolins M., Abramov V., Acharya B., Acosta D., Adams D., Adams M., Affolder T., et al.  
PHYSICAL REVIEW D, vol.70, no.9, 2004 (SCI-Expanded)
- XXXIX. **Underlying event in hard interactions at the Fermilab Tevatron  $p(\bar{p})$  collider**  
Acosta D., Affolder T., Albrow M., Ambrose D., Amidei D., Anikeev K., Antos J., Apollinari G., Arisawa T., Artikov A., et al.  
PHYSICAL REVIEW D, vol.70, no.7, 2004 (SCI-Expanded)
- XL. **Direct photon cross section with conversions at CDF**  
Acosta D., Affolder T., Albrow M., Ambrose D., Amidei D., Anikeev K., Antos J., Apollinari G., Arisawa T., Artikov A., et al.  
PHYSICAL REVIEW D, vol.70, no.7, 2004 (SCI-Expanded)

- XLI. Inclusive double-Pomeron exchange at the Fermilab tevatron (p)over-bar p collider**  
Acosta D., Affolder T., Akimoto H., Albrow M., Ambrose D., Amidei D., Anikeev K., Antos J., Apollinari G., Arisawa T., et al.  
PHYSICAL REVIEW LETTERS, vol.93, no.14, 2004 (SCI-Expanded)
- XLII. Observation of the narrow state X(3872)-> J/psi pi(+)pi(-) in (p)over-bar p collisions at root s=1.96 TeV**  
Acosta D., Affolder T., Ahn M., Akimoto T., Albrow M., Ambrose D., Amerio S., Amidei D., Anastassov A., Anikeev K., et al.  
PHYSICAL REVIEW LETTERS, vol.93, no.7, 2004 (SCI-Expanded)
- XLIII. Inclusive search for anomalous production of high-p(T) like-sign lepton pairs in p(p)over-bar collisions at root s=1.8 TeV**  
Acosta D., Affolder T., Albrow M., Ambrose D., Amidei D., Anikeev K., Antos J., Apollinari G., Arisawa T., Artikov A., et al.  
PHYSICAL REVIEW LETTERS, vol.93, no.6, 2004 (SCI-Expanded)
- XLIV. Measurement of the polar-angle distribution of leptons from W boson decay as a function of the W transverse momentum in p(p)over-bar collisions at root s=1.8 TeV**  
Acosta D., Affolder T., Albrow M., Ambrose D., Amidei D., Anikeev K., Antos J., Apollinari G., Arisawa T., Artikov A., et al.  
PHYSICAL REVIEW D, vol.70, no.3, 2004 (SCI-Expanded)
- XLV. Search for B(s)(0)->mu(+)mu(-) and B(d)(0)->mu(+)mu(-) decays in p(p)over-bar collisions at root s=1.96 TeV**  
Acosta D., Affolder T., Akimoto T., Albrow M., Ambrose D., Amerio S., Amidei D., Anastassov A., Anikeev K., Annovi A., et al.  
PHYSICAL REVIEW LETTERS, vol.93, no.3, 2004 (SCI-Expanded)
- XLVI. Search for Kaluza-Klein graviton emission in p(p)over-bar collisions at root s=1.8 TeV using the missing energy signature**  
Acosta D., Affolder T., Akimoto H., Albrow M., Ambrose D., Amidei D., Anikeev K., Antos J., Apollinari G., Arisawa T., et al.  
PHYSICAL REVIEW LETTERS, vol.92, no.12, 2004 (SCI-Expanded)
- XLVII. Optimized search for single-top-quark production at the Fermilab Tevatron**  
Acosta D., Affolder T., Albrow M., Ambrose D., Amidei D., Anikeev K., Antos J., Apollinari G., Arisawa T., Artikov A., et al.  
PHYSICAL REVIEW D, vol.69, no.5, 2004 (SCI-Expanded)
- XLVIII. Search for pair production of scalar top quarks in R-parity violating decay modes in p(p)over-bar collisions at root s=1.8 TeV**  
Acosta D., Affolder T., Akimoto H., Albrow M., Ambrose D., Amidei D., Anikeev K., Antos J., Apollinari G., Arisawa T., et al.  
PHYSICAL REVIEW LETTERS, vol.92, no.5, 2004 (SCI-Expanded)
- XLIX. Measurement of the average time-integrated mixing probability of b-flavored hadrons produced at the Fermilab Tevatron**  
Acosta D., Affolder T., Akimoto H., Albrow M., Ambrose D., Amidei D., Anikeev K., Antos J., Apollinari G., Arisawa T., et al.  
PHYSICAL REVIEW D, vol.69, no.1, 2004 (SCI-Expanded)
- L. Measurement of prompt charm meson production cross sections in p(p)over-bar collisions at root s=1.96 TeV**  
Acosta D., Affolder T., Ahn M., Akimoto T., Albrow M., Ambrose D., Amidei D., Anastassov A., Anikeev K., Annovi A., et al.  
PHYSICAL REVIEW LETTERS, vol.91, no.24, 2003 (SCI-Expanded)
- LI. Search for lepton flavor violating decays of a heavy neutral particle in p(p)over-bar collisions at root s=1.8 TeV**  
Acosta D., Affolder T., Akimoto H., Albrow M., Ambrose D., Amidei D., Anikeev K., Antos J., Apollinari G., Arisawa T., et al.

et al.

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- LII. **Measurement of the mass difference  $m(D-s(+))-m(D+)$  at CDF II**  
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- LV. **Search for the supersymmetric partner of the top quark in dilepton events from  $p\bar{p}$  collisions at  $\sqrt{s}=1.8$  TeV**  
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- LVI. **Search for associated production of Upsilon and vector boson in  $p\bar{p}$  collisions at  $\sqrt{s}=1.8$  TeV**  
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- LXIX. **Soft and hard interactions in  $p(\bar{p})$  collisions at  $\sqrt{s}=1800$  and  $630$  GeV**  
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- LXXIV. **Localized structures of electromagnetic waves in hot electron-positron plasmas**  
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## Articles Published in Other Journals

### I. Calculation of Surface Tension and Viscosity of Liquid Transition Metals

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## Books & Book Chapters

### I. Üniversiteler için Fizik II

KARTAL S.

Nobel Akademik Yayıncılık Eğitim Danışmanlık Tic. Ltd. Şti., İstanbul, 2016

### II. Electromagnetic Waves

Altıntaş A. A., Yılmaz A., Bölükbaşı Yalçinkaya O., Ünsalan O., Tavukoğlu Şahin Z., Olgun A. T., Kartal S. (Editor)

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### III. Özel Görelilik ve Kuantum Mekaniğine Giriş

KARTAL S.

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### IV. Inductance and circuit oscillations-Alternating Current

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### V. Instrumentation in Elementary Particle Physics

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## Refereed Congress / Symposium Publications in Proceedings

### I. Pentilentetrazol ile İndüklenen Nöbetlerin Periferik Dokularda Biyomoleküler Yapı Üzerine Etkilerinin Fourier Transform İnfrared Spektroskopi Yöntemi ile Araştırılması ve Oksidatif Stres Markırları ile Karşılaştırılması.

ÜZÜM G., Erdem Kuruca S., Kaptan Z., KAPUCU A., AKGÜN DAR K., YILMAZ A., BÖLÜKBAŞI YALÇINKAYA O., KARTAL S., Kaleler İ., KURUCA D. S.

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### II. Underline event and background studies in pp collisions at 100 TeV at FCC

KARTAL S., bölükbaşı o., yılmaz a.

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### III. CO2 as Refrigreant in Food Refrigeration

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### IV. Pre-cooling of ton-scale particle detectors in low radioactivity environments.

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### V. The Cuore Fast Cooling system

Pagliarone C. E., Cappelli L., Carlo B., Gorla P., D'Aguzzo D., Marignetti F., Erme G., KARTAL S.

EPS Conference on High Energy Physics, 2017, Venedik, Italy, 5 - 12 July 2017, pp.634

### VI. Resonant Production of Scalar Leptons via RPV Couplings at the FCC

Kartal S., Bölükbaşı Yalçinkaya O., Yılmaz A., Özdemir K., Sultansoy S., Şahin M.

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- VII. **Probing Anomalous HVV Couplings at the FCC-eh**  
ALTINLI M., İlkay T. Ç., BÖLÜKBAŞI YALÇINKAYA O., Abdülkadir Ş., KARTAL S., Çakır O.  
FCC Week 2017, Berlin Germany, Berlin, Germany, 29 May - 02 June 2017, pp.275
- VIII. **CAT 2-An improved Version of Cryogenic Analysis Tools for Online and Offline Monitoring and Analysis of Large Size Cryostats**  
Pagliarone C. E., Uttaro S., Cappelli L., Fallone M., Kartal S.  
32nd International Physics Congress of Turkish-Physical-Society (TPS), Bodrum, Turkey, 6 - 09 September 2016, vol.1815
- IX. **SEARCH ON GAUGE BOSON WITH HIGGS ANOMALOUS COUPLINGS AT EP-COLLIDERS**  
BÖLÜKBAŞI YALÇINKAYA O., ALTINLI M., TÜRK ÇAKIR İ., YILMAZ A., ŞENOL A. k., KARTAL S.  
TFD32 Uluslararası Fizik Kongresi, Muğla, Turkey, 6 - 09 September 2016, pp.15-16
- X. **Thermodynamical and Structural Properties of Some Liquid Transition Metals near Melting Point**  
Ucar S., Kartal S., Armagan T.  
9th International Physics Conference of the Balkan-Physical-Union (BPU), İstanbul, Turkey, 24 - 27 August 2015, vol.1722
- XI. **CAT - Cryogeny Analysis Tools For Online and Offline Monitoring and Analysis of Large Size Cryostats**  
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9th International Physics Conference of the Balkan-Physical-Union (BPU), İstanbul, Turkey, 24 - 27 August 2015, vol.1722

## **Memberships / Tasks in Scientific Organizations**

CERN-ALICE, Country Representative, 2021 - Continues, Switzerland  
CERN-FCC, Country Representative, 2019 - Continues, Switzerland  
Futuristic Association, Member, 2019 - Continues, Turkey  
European Physical Society, Member, 1994 - Continues, United Kingdom  
Istanbul University Faculty Members Association, Board Member, 2010 - 2018, Turkey  
Türk Fizik Derneği, Board Member, 1999 - 2002

## **Scientific Refereeing**

TUBITAK Project, December 2018  
TUBITAK Project, June 2018  
Turkish Journal of Physics, SCI Journal, November 2017  
TURKISH JOURNAL OF PHYSICS , SCI Journal, January 2017  
Bilimsel Telif ve Çeviri Eser Ödülleri Programı ( TEÇEP), Other Journals, March 2014  
TUBITAK Project, April 2013  
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## **Metrics**

Publication: 91  
Citation (WoS): 4099  
Citation (Scopus): 3878

H-Index (WoS): 29

H-Index (Scopus): 25

## Congress and Symposium Activities

- 6- CERN deneyleri ve Ülkemizden Katılan Üniversitelerin genel değerlendirmesi, Attendee, Ankara, Turkey, 2017
- RECFA-Country Meeting, Boğaziçi Üniversitesi, İstanbul,, Attendee, İstanbul, Turkey, 2017
- TPS33, International Physics Congress, Attendee, Muğla, Turkey, 2017
- FCC-Week 2017, Berlin Almanya, Attendee, Berlin, Germany, 2017
- Geleceğin Dairesel Çarpıştırıcısı, Marmara Üniversitesi , Fizik Bölümü, Attendee, Turkey, 2017
- Cern ve Medikal Uygulamalar, İstanbul Tıp Fakültesi, Attendee, İstanbul, Turkey, 2017
- Geleceğe Davetlisiniz, Gelecek Yüzyılın Deneyinde bir Türk İmzası, Tarhan Koleji, Attendee, İstanbul, Turkey, 2017
- Cern'de Neler Oluyor, Marmara Koleji, Attendee, İstanbul, Turkey, 2017
- 1st FCC Physics Workshop, CERN ,İsviçre, Attendee, Genève, Switzerland, 2017
- FCC-İstanbul Veri analiz Okulu, Attendee, İstanbul, Turkey, 2016
- Gelecek Yüzyılın Deneyinde Bir Türk İmzası, Attendee, Kocaeli, Turkey, 2016
- USİMP Patent Fuarı, Attendee, Turkey, 2016
- Hello Tomorrow Istanbul- The Future of Energy, Attendee, Turkey, 2016
31. Şişecam Sempozyumu- Sürdürülebilir Gelecekte Cam, Attendee, İstanbul, Turkey, 2016
- Innovations in Learning for the Future, Attendee, Turkey, 2016
- TPS32- International Physics Congress, Attendee, Muğla, Turkey, 2016
- Hızlandırıcı ve Algıç Fiziği Çalıştayı, Attendee, İstanbul, Turkey, 2016
- IICEC 7th International Energy and Climate Forum, Attendee, İstanbul, Turkey, 2016
- Değişen Müze Teknolojileri, Attendee, İstanbul, Turkey, 2016
- 3rd International University Museums Association Conference, Attendee, Edirne, Turkey, 2016
- FCC Physics, Detector and Accelerator Workshop @ İstanbul, Attendee, İstanbul, Turkey, 2016
- İstanbul Security Conference,03-05 December 2015, İstanbul, Attendee, İstanbul, Turkey, 2015
- Marie Skeodowska Curie Actions Briding Business and Research , 23 October 2015 İstanbul, Attendee, Turkey, 2015
- 9th International Physics Conference of the Balkan Physical Union – BPU9 , 24-27 August 2015 , İstanbul University , İstanbul , Turkey, Attendee, İstanbul, Turkey, 2015
- II. Uluslararası Üniversite Müzeleri Birliği Paltformu, Attendee, Boğaziçi Üniversitesi İstanbul, Turkey, 2015
- Türkiye İnovasyon Haftası, Attendee, İstanbul, Turkey, 2014
- Turkcell Teknoloji zirvesi, Attendee, İstanbul, Turkey, 2014
- German-Turkhis University Cooperation, Attendee, İstanbul, Turkey, 2014
- Yüksek Enerji Fiziği ve Nükleer Fizikte Hesaplama Teknikleri Mini Çalıştayı, Attendee, İstanbul Aydın Üniversitesi, İstanbul, Turkey, 2014
- I. Üniversite Müzeleri Platformu, Attendee, Deniz Müzesi , Beşiktaş -İstanbul, Turkey, 2014
- İyon Kanalları ve Kanser Sempozyumu, Attendee, İstanbul Üniversitesi Kongre ve Kültür Merkezi, Turkey, 2014
18. Türkiye'de İnternet Konferansı, Attendee, İstanbul Üniversitesi, İstanbul, Turkey, 2013
- TFD28 Uluslararası Fizik Kongresi, Attendee, Bodrum, Turkey, 2011
- Akademik Bilişim Konferansı, İnönü Üniversitesi, Attendee, Malatya, Turkey, 2011
- XV. Türkiye'de İnternet Konferansı, İstanbul Teknik Üniversitesi, Attendee, İstanbul, Turkey, 2010
- TFD27 Uluslararası Fizik Kongresi, Attendee, Bodrum, Turkey, 2010

## Awards

- KARTAL S., Uluslararası yayınlarla Türkiye Bilimine katkılarından ötürü "1998 yılı Prof. Dr. Nazım Terzioğlu Ödüsü", İstanbul Üniversitesi araştırma Fonu, December 1998
- KARTAL S., Genç Bilim Adamı Ödülü " Asymmetryin shape F-Region and its role in Ionospheric Modeling", URSI,

September 1993