

Prof. MURAT KÖKSAL

Personal Information

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Education Information

Doctorate, Bülent Ecevit Üniversitesi, Fen-Edebiyat Fakültesi, Fizik Bölümü, Turkey 2007 - 2012

Postgraduate, Sivas Cumhuriyet Üniversitesi, Fen-Edebiyat Fakültesi, Turkey 2003 - 2006

Undergraduate, Ankara Üniversitesi, Fen Fakültesi, Fizik Bölümü, Turkey 1998 - 2002

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Standart model ötesi fiziğin araştırılmasında nötrino etkileşimleri, Bülent Ecevit Üniversitesi, Fen-Edebiyat Fakültesi, Fizik Bölümü, 2012

Postgraduate, Heteroyapılarda alan altında kutuplanabilirlik ve fotoiyonizasyon tesir-kesiti hesabı, Sivas Cumhuriyet Üniversitesi, Fen-Edebiyat Fakültesi, 2006

Research Areas

Natural Sciences

Academic Titles / Tasks

Professor, Sivas Cumhuriyet University, Teknoloji Fakültesi, Optik Mühendisliği, 2021 - Continues

Associate Professor, Sivas Cumhuriyet University, Teknoloji Fakültesi, Optik Mühendisliği, 2016 - Continues

Assistant Professor, Sivas Cumhuriyet University, Teknoloji Fakültesi, Optik Mühendisliği, 2014 - Continues

Assistant Professor, Sivas Cumhuriyet University, Fen Fakültesi, İstatistik Ve Bilgisayar Bilimleri Bölümü, 2013 - 2014

Research Assistant, Sivas Cumhuriyet University, Fen Fakültesi, Fizik Bölümü, 2008 - 2013

Academic and Administrative Experience

Sivas Cumhuriyet Üniversitesi, Teknoloji Fakültesi, 2014 - Continues

Sivas Cumhuriyet Üniversitesi, Fen-Edebiyat Fakültesi, 2013 - 2014

Courses

Statik, Undergraduate, 2019 - 2020
Lazer Fiziği Uygulamaları-I, Postgraduate, 2019 - 2020
İleri Fizik Optik, Postgraduate, 2019 - 2020
Seminer Dersi, Postgraduate, 2016 - 2017
Statik, Undergraduate, 2017 - 2018
Statik, Undergraduate, 2017 - 2018
Statik, Undergraduate, 2017 - 2018
Lens Tasarımı ve Kusurları, Postgraduate, 2017 - 2018
Optik İnce Film Kaplama Teknikleri, Postgraduate, 2016 - 2017
Uzmanlık Alan Dersi, Postgraduate, 2017 - 2018
Statik, Undergraduate, 2017 - 2018
Statik, Undergraduate, 2017 - 2018
Teknik Çeviri, Undergraduate, 2016 - 2017
Teknik Çeviri, Undergraduate, 2016 - 2017
Statik, Undergraduate, 2016 - 2017
Statik, Undergraduate, 2016 - 2017
İstatistik, Undergraduate, 2014 - 2015
Bilgisayar - I, Undergraduate, 2014 - 2015

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Model-independent study on the anomalous $\tau\tau^-\gamma$ couplings at the ILC**
KÖKSAL M.
Nuclear Physics B, vol.971, 2021 (Journal Indexed in SCI Expanded)
- II. **Search for the anomalous $WW\gamma$ couplings through the process $e^-e^+\rightarrow\nu e\nu^-\gamma$ at ILC with unpolarized and polarized beams**
Spor S., KÖKSAL M.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.820, 2021 (Journal Indexed in SCI Expanded)
- III. **Analysis of the anomalous quartic $WWWW$ couplings at the LHeC and the FCC-he**
Gurkanli E., Ari V., Billur A. A. , Koksals M.
EUROPEAN PHYSICAL JOURNAL PLUS, vol.136, no.7, 2021 (Journal Indexed in SCI)
- IV. **Model-independent limits for anomalous triple gauge bosons $W+W$ -gamma couplings at the CLIC**
Billur A. A. , Koksals M., Gutierrez-Rodriguez A., Hernandez-Ruiz M. A.
EUROPEAN PHYSICAL JOURNAL PLUS, vol.136, no.6, 2021 (Journal Indexed in SCI)
- V. **Study on the anomalous quartic $W+W$ - gamma gamma couplings of electroweak bosons in $e(-) p$ collisions at the LHeC and the FCC-he**
Gutierrez-Rodriguez A., Hernandez-Ruiz M. A. , Gurkanli E., Ari V., Koksals M.
EUROPEAN PHYSICAL JOURNAL C, vol.81, no.3, 2021 (Journal Indexed in SCI)
- VI. **Sensitivity measuring expected on the electromagnetic anomalous couplings in the $t(t)\overline{\text{bar}}$ gamma vertex at the FCC-he**
Köksal M., Billur A. A. , Gutierrez-Rodriguez A., Hernandez-Ruiz M. A.
INTERNATIONAL JOURNAL OF MODERN PHYSICS A, vol.35, no.28, 2020 (Journal Indexed in SCI)
- VII. **Bounds on the non-standard $W+W-\gamma$ couplings at the LHeC and the FCC-he**
Köksal M., Billur A. A. , Gutierrez-Rodriguez A., Hernández-Ruiz M.
Physics Letters B, vol.808, pp.135661-135682, 2020 (Journal Indexed in SCI)
- VIII. **Sensitivity physics expected to the measurement of the quartic WW gamma gamma couplings at the LHeC and the FCC-he**
Gurkanli E., Ari V., Gutierrez-Rodriguez A., Hernandez-Ruiz M. A. , Köksal M.
JOURNAL OF PHYSICS G-NUCLEAR AND PARTICLE PHYSICS, vol.47, no.9, 2020 (Journal Indexed in SCI)

- IX. Model independent study for the anomalous $W+W-$ gamma couplings at the future lepton-hadron colliders**
Spor S., Billur A. A. , Köksal M.
EUROPEAN PHYSICAL JOURNAL PLUS, vol.135, no.8, 2020 (Journal Indexed in SCI)
- X. Model independent study for the anomalous quartic WW gamma gamma couplings at future electron-proton colliders**
Ari V., Gurkanli E., Billur A. A. , Köksal M.
NUCLEAR PHYSICS B, vol.957, 2020 (Journal Indexed in SCI)
- XI. Model-independent sensitivity estimates for the electromagnetic dipole moments of the top quark at the Large Hadron Collider and beyond**
Köksal M.
NUCLEAR PHYSICS B, vol.956, 2020 (Journal Indexed in SCI)
- XII. Probing model-independent limits on $W+W$ -gamma triple gauge boson vertex at the LHeC and the FCC-he**
Gutierrez-Rodriguez A., Koksalsal M., Billur A. A. , Hernandez-Ruiz M. A.
JOURNAL OF PHYSICS G-NUCLEAR AND PARTICLE PHYSICS, vol.47, no.5, 2020 (Journal Indexed in SCI)
- XIII. Anomalous quartic $W+W-$ gamma gamma couplings in $e(-) p$ collisions at the LHeC and the FCC-he**
Ari V., Gurkanli E., Gutierrez-Rodriguez A., Hernandez-Ruiz M. A. , Koksalsal M.
EUROPEAN PHYSICAL JOURNAL PLUS, vol.135, no.3, 2020 (Journal Indexed in SCI)
- XIV. Probing the anomalous electromagnetic dipole moments of the top quark in gamma p collision at the LHC, the HL-LHC and the HE-LHC**
Koksalsal M.
NUCLEAR PHYSICS B, vol.950, 2020 (Journal Indexed in SCI)
- XV. Probing the anomalous tq gamma couplings through single top production at the future lepton-hadron colliders**
Alici E., KÖKSAL M.
MODERN PHYSICS LETTERS A, vol.34, no.36, 2019 (Journal Indexed in SCI)
- XVI. Projections for model-independent limit estimates on top-quark anomalous electromagnetic couplings at the FCC-he**
Billur A. A. , Köksal M., Gutierrez-Rodriguez A., Hernandez-Ruiz M. A.
EUROPEAN PHYSICAL JOURNAL PLUS, vol.134, 2019 (Journal Indexed in SCI)
- XVII. Studies on the anomalous magnetic and electric dipole moments of the tau-neutrino in pp collisions at the LHC**
Gutierrez-Rodriguez A., KÖKSAL M., BILLUR A. A. , Hernandez-Ruiz M. A.
EUROPEAN PHYSICAL JOURNAL A, vol.55, no.8, 2019 (Journal Indexed in SCI)
- XVIII. Search for the electromagnetic moments of the tau lepton in photon-photon collisions at the LHeC and the FCC-he**
Koksalsal M.
JOURNAL OF PHYSICS G-NUCLEAR AND PARTICLE PHYSICS, vol.46, no.6, 2019 (Journal Indexed in SCI)
- XIX. The $\mu(+)\mu(-)$ collider to sensitivity estimates on the magnetic and electric dipole moments of the tau-lepton**
Koksalsal M., Billur A. A. , Gutierrez-Rodriguez A., Hernandez-Ruiz M. A.
INTERNATIONAL JOURNAL OF MODERN PHYSICS A, vol.34, no.15, 2019 (Journal Indexed in SCI)
- XX. FCC-he sensitivity estimates on the anomalous electromagnetic dipole moments of the top-quark**
Hernandez-Ruiz M. A. , Gutierrez-Rodriguez A., Koksalsal M., Billur A. A.
NUCLEAR PHYSICS B, vol.941, pp.646-664, 2019 (Journal Indexed in SCI)
- XXI. Model-independent sensibility studies for the anomalous dipole moments of the $\nu(\text{tau})$ at the CLIC based $e(+)\mu(-)$ and gamma $e(-)$ colliders**
Billur A. A. , Koksalsal M., Gutierrez-Rodriguez A., Hernandez-Ruiz M. A.
PHYSICAL REVIEW D, vol.98, no.9, 2018 (Journal Indexed in SCI)
- XXII. Analysis of the anomalous electromagnetic moments of the tau lepton in gamma p collisions at the**

LHC

Koksal M., Inan S. C. , Billur A. A. , Ozguven Y., Bahar M. K.

PHYSICS LETTERS B, vol.783, pp.375-380, 2018 (Journal Indexed in SCI)

XXIII. Model-independent sensitivity estimates for the electromagnetic dipole moments of the tau-lepton at the CLIC

Koksal M., Billur A. A. , Gutierrez-Rodriguez A., Hernandez-Ruiz M. A.

PHYSICAL REVIEW D, vol.98, no.1, 2018 (Journal Indexed in SCI)

XXIV. Search for the anomalous electromagnetic moments of tau lepton through electron-photon scattering at CLIC

Ozguven Y., Billur A. A. , Inan S. C. , Bahar M. K. , Koksal M.

NUCLEAR PHYSICS B, vol.923, pp.475-490, 2017 (Journal Indexed in SCI)

XXV. Improved sensitivity on the electromagnetic dipole moments of the top quark in gamma gamma, gamma gamma* and gamma*gamma* collisions at the CLIC

Billur A. A. , Koksal M., Gutierrez-Rodriguez A.

PHYSICAL REVIEW D, vol.96, no.5, 2017 (Journal Indexed in SCI)

XXVI. Probe of the Anomalous Quartic Couplings with Beam Polarization at the CLIC

Senol A., Koksal M., Inan S. C.

ADVANCES IN HIGH ENERGY PHYSICS, 2017 (Journal Indexed in SCI)

XXVII. Bounds on the Electromagnetic Dipole Moments through the Single Top Production at the CLIC

Koksal M., Billur A. A. , Gutierrez-Rodriguez A.

ADVANCES IN HIGH ENERGY PHYSICS, 2017 (Journal Indexed in SCI)

XXVIII. Anomalous WW gamma couplings with beam polarization at the Compact Linear Collider

Ari V., Billur A. A. , Inan S. C. , Koksal M.

NUCLEAR PHYSICS B, vol.906, pp.211-230, 2016 (Journal Indexed in SCI)

XXIX. Search for Anomalous Quartic ZZ gamma gamma Couplings in Photon-Photon Collisions

Koksal M., Ari V., Senol A.

ADVANCES IN HIGH ENERGY PHYSICS, 2016 (Journal Indexed in SCI)

XXX. Search for anomalous quartic WWZ gamma couplings at the future linear e(+)e(-) collider

Koksal M., Senol A.

INTERNATIONAL JOURNAL OF MODERN PHYSICS A, vol.30, no.20, 2015 (Journal Indexed in SCI)

XXXI. Improved bounds on the dipole moments of the tau neutrino from high-energy gamma*e(-) and gamma*gamma* collisions at the ILC and CLIC

Gutierrez-Rodriguez A., Koksal M., Billur A. A.

PHYSICAL REVIEW D, vol.91, no.9, 2015 (Journal Indexed in SCI)

XXXII. Anomalous quartic ZZ gamma gamma couplings at the CLIC

Koksal M.

EUROPEAN PHYSICAL JOURNAL PLUS, vol.130, no.4, 2015 (Journal Indexed in SCI)

XXXIII. Probe of anomalous quartic WWZ gamma couplings in photon-photon collisions

Senol A., Koksal M.

JOURNAL OF HIGH ENERGY PHYSICS, no.3, 2015 (Journal Indexed in SCI)

XXXIV. Analysis of anomalous quartic W W Z gamma couplings in gamma p collision at the LHC

Senol A., Koksal M.

PHYSICS LETTERS B, vol.742, pp.143-148, 2015 (Journal Indexed in SCI)

XXXV. Graviton production through photon-quark scattering at the LHC

Sahin I., Koksal M., Inan S. C. , Billur A. A. , Sahin B., Tektas P., Alici E., Yildirim R.

PHYSICAL REVIEW D, vol.91, no.3, 2015 (Journal Indexed in SCI)

XXXVI. Study of anomalous WW gamma gamma coupling sensitivity at the compact linear collider

Koksal M.

MODERN PHYSICS LETTERS A, vol.29, no.34, 2014 (Journal Indexed in SCI)

XXXVII. Analysis of excited neutrinos at the CLIC

Koksal M.

- INTERNATIONAL JOURNAL OF MODERN PHYSICS A, vol.29, no.24, 2014 (Journal Indexed in SCI)
- XXXVIII. **Probe of the electromagnetic moments of the tau lepton in gamma-gamma collisions at the CLIC**
Billur A. A. , Koksal M.
PHYSICAL REVIEW D, vol.89, no.3, 2014 (Journal Indexed in SCI)
- XXXIX. **Search for the Anomalous Interactions of Up-Type Heavy Quarks in gamma gamma Collision at the LHC**
Koksal M., Inan S. C.
ADVANCES IN HIGH ENERGY PHYSICS, 2014 (Journal Indexed in SCI)
- XL. **Anomalous tq gamma Couplings in gamma p Collision at the LHC**
Koksal M., Inan S. C.
ADVANCES IN HIGH ENERGY PHYSICS, 2014 (Journal Indexed in SCI)
- XLI. **THE EFFECT OF ELECTROMAGNETIC PROPERTIES OF NEUTRINOS ON THE PHOTON-NEUTRINO DECOUPLING TEMPERATURE**
Inan S. C. , Koksal M.
INTERNATIONAL JOURNAL OF MODERN PHYSICS A, vol.27, no.32, 2012 (Journal Indexed in SCI)
- XLII. **The Impact of Excited Neutrinos on nu(nu)over-bar -> gamma gamma Process**
Inan S. C. , Koksal M.
ADVANCES IN HIGH ENERGY PHYSICS, 2012 (Journal Indexed in SCI)
- XLIII. **Search for electromagnetic properties of the neutrinos at the LHC**
Sahin I., Koksal M.
JOURNAL OF HIGH ENERGY PHYSICS, no.3, 2011 (Journal Indexed in SCI)
- XLIV. **The effects of the magnetic field and dielectric screening on the diamagnetic susceptibility of a donor in a quantum well with anisotropic effective mass**
Kilicarslan E., Sakiroglu S., Koksal M., Sari H., Sokmen I.
PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, vol.42, no.5, pp.1531-1535, 2010 (Journal Indexed in SCI)
- XLV. **Magnetic-field effect on the diamagnetic susceptibility of hydrogenic impurities in quantum well-wires**
Koksal M., Kilicarslan E., Sari H., Sokmen I.
PHYSICA B-CONDENSED MATTER, vol.404, no.21, pp.3850-3854, 2009 (Journal Indexed in SCI)
- XLVI. **Photoionization cross-section and binding energy of donor impurities in GaAs, Ge and Si quantum wires with infinite barriers**
Koksal M., Kasapoglu E., Sari H., Sokmen I.
SUPERLATTICES AND MICROSTRUCTURES, vol.46, no.3, pp.507-512, 2009 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **Probing the Anomalous tqγ Couplings in γγ Collisions at the LHC**
Köksal M.
Cumhuriyet Science Journal, vol.37, no.4, pp.32-38, 2016 (National Refreed University Journal)
- II. **Search for the anomalous electromagnetic moments of the tau lepton through electron photon scattering at the CLIC**
ÖZGÜVEN Y., İNAN S. C. , BİLLUR A. A. , KÖKSAL M., BAHAR M. K.
arXiv, 2016 (Non-Refreed Journal)
- III. **Nötrinin Elektromagnetik Özellikleri**
KÖKSAL M., ŞAHİN İ.
Karaelmas Science and Engineering Journal, vol.1, pp.15-19, 2011 (Other Refreed National Journals)

Refereed Congress / Symposium Publications in Proceedings

- I. **Sensitivity on the electromagnetic dipole moment of the tau-lepton at the CLIC**
hernandezruiz M., Gutierrezrodriguez A., BİLLUR A. A. , KÖKSAL M.
15th international workshop on Tau Lepton Physics, 24 - 28 September 2018
- II. **Limits on the anomalous magnetic and electric dipole moments of the tau-neutrino in pp collisions at the LHC**
gutierrezrodriguez a., KÖKSAL M., BİLLUR A. A. , hernandezruiz m.
15th International Workshop on Tau Lepton Physics, 24 - 28 September 2018
- III. **Limits on the anomalous magnetic and electric dipole moments of the τ -neutrino in pp collisions at the LHC**
Gutierrezrodriguez A., KÖKSAL M., BİLLUR A. A. , hernandezruiz M.
the 15th International Workshop on Tau Lepton Physics, 24 - 28 September 2018
- IV. **Probing the dipole moments of the top quark at high energy photon-photon collisions at the CLIC**
BİLLUR A. A. , KÖKSAL M., Gutierrezrodriguez A.
Türk fizik Derneği 33. Uluslararası Fizik Kongresi, 6 - 10 September 2017
- V. **Search for anomalous top-gamma interactions through gamma-gamma collisions at the CLIC**
KÖKSAL M., İNAN S. C. , BİLLUR A. A.
3th International Conference on Engineering and Natural Sciences, 3 - 07 May 2017
- VI. **Probing The Anomalous Electromagnetic Moments Of The Tau Lepton In $\gamma\gamma$ Collisions At The LHC**
KÖKSAL M., İNAN S. C. , BİLLUR A. A. , BAHAR M. K. , Özgüven Y.
Türk Fizik Derneği 33. Uluslararası Fizik Kongresi, 6 - 10 September 2017
- VII. **Probing for the anomalous electromagnetic moments of the tau lepton via electron-photon interactions at the CLIC**
BİLLUR A. A. , KÖKSAL M., İNAN S. C.
3th International Conference on Engineering and Natural Sciences, 3 - 07 May 2017
- VIII. **Gauge Bosons Anomalous Quartic Couplings Search at the CLIC**
İNAN S. C. , KÖKSAL M., ŞENOL A.
III. International Conference on Engineering and Natural Sciences, 3 - 07 May 2017
- IX. **Search for spin 3/2 excited leptons via photon induced reactions at the LHC**
İNAN S. C. , BİLLUR A. A. , KÖKSAL M.
3rd International Conference on Engineering and Natural Science, 3 - 07 May 2017
- X. **Search for the electromagnetic dipole moments of the top quark at the CLIC**
KÖKSAL M., BİLLUR A. A. , Gutierrezrodriguez A.
3RD international conference on engineering and natural sciences, 3 - 07 May 2017
- XI. **Probing the Anomalous Quartic ZZGG Couplings in the Future Linear Colliders**
KÖKSAL M., ARI V., SENOL A.
IX. INTERNATIONAL WORKSHOP ON NUCLEAR STRUCTURE PROPERTIES, 1 - 03 September 2016
- XII. **Probing the dipole moments of the tau neutrino at high energy e and collisions ILC and CLIC**
rodriguez alejandro g., KÖKSAL M., BİLLUR A. A.
European Physical Society HEP 2015, 22 - 29 July 2015, vol.52
- XIII. **Probing the dipole moments of the tau neutrino at high energy γe and $\gamma\gamma$ collisions ILC and CLIC**
Alejandro G. R. , KÖKSAL M., BİLLUR A. A.
European Physical Society Conference on High Energy Physics 2015, 22 - 29 July 2015
- XIV. **The polarizability and the photoionization cross-section under the external fields for donor impurities in quantum well-wire**
Köksal M., Kasapoglu E., Sari H., Sokmen I.
International Conference on Superlattices, Nano-Structures and Nano-Devices, İstanbul, Turkey, 30 July - 04 August 2006, vol.4, pp.332-333

Citations

Total Citations (WOS):357

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