

## Lect. SELÇUK BİLMİŞ

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: ABB-1052-2021

ScopusID: 35221101600

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### Education Information

Doctorate, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, Turkey 2010 - 2016

Postgraduate, Middle East Technical University, Graduate School of Natural and Applied Sciences, Fizik (YI) (Tezli), Turkey 2007 - 2010

Undergraduate, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, Turkey 2002 - 2007

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, Probing physics beyond the standard model through neutrino-electron scatterings, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 2016

Postgraduate, Study on non standard interaction of neutrino and unparticle physics with neutrino-electron scattering data at low energy in texono experiment, Middle East Technical University, Graduate School of Natural and Applied Sciences, Fizik (YI) (Tezli), 2010

### Research Areas

Basic Particles and Areas, Properties of special particles, Special reactions and phenomenology, Special theories and interaction models, particle systematics

### Academic Titles / Tasks

Research Assistant, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 2008 - Continues

Research Assistant, Kek - High Energy Accelerator Research Organization / Belle , 2017 - 2017

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

- I. **Analysis of strong decays of  $SU(3)$  partners of  $\Omega(2112)$  baryon**  
Aliiev T., BİLMİŞ S., Savci M.  
CHINESE PHYSICS C, vol.48, no.8, 2024 (SCI-Expanded)
- II. **QCD sum rule study of  $J^P = 1^{\pm}$  exotic states with two heavy quarks in the molecular picture**  
Aliyev T., Bilmis S., Savci M.  
CHINESE PHYSICS C, vol.48, no.6, 2024 (SCI-Expanded)
- III. **The study of weak decays induced by [Formula presented] transition in light-cone sum rules**  
ALIYEV T., BİLMİŞ S., SAVCI M.  
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.847, 2023 (SCI-Expanded)
- IV. **Analysis of the light  $J^P = 3^-$  mesons in QCD sum rules**  
Aliyev T., Bilmis S., Savci M.  
Physical Review D, vol.108, no.3, 2023 (SCI-Expanded)
- V. **Looking for heavy axial tensor mesons via their strong decays in light cone QCD**  
Aliyev T., Bilmis S., Çiftci R. A., Savci M.  
Physical Review D, vol.107, no.5, 2023 (SCI-Expanded)
- VI. **Charmed baryon  $\omega_c^0 \rightarrow \omega^- l^+ \nu_l$  and  $\omega_c^0 \rightarrow \omega^- \pi^+ (\rho^+)$  decays in light cone sum rules**  
Aliyev T., Savci M., Bilmis S.  
Physical Review D, vol.106, no.7, 2022 (SCI-Expanded)
- VII. **Weak  $\Xi(QQ) \rightarrow \Sigma(Q)l^{(\pm)}$  decays induced by FCNC in QCD**  
ALIYEV T., Savci M., BİLMİŞ S.  
EUROPEAN PHYSICAL JOURNAL C, vol.82, no.10, 2022 (SCI-Expanded)
- VIII. **Analysis of FCNC  $\Xi_{QQ} \rightarrow \Lambda_{Ql} l^{(\pm)}$  decay in light-cone sum rules**  
ALIYEV T., SAVCI M., BİLMİŞ S.  
Physical Review D, vol.106, no.3, 2022 (SCI-Expanded)
- IX. **Determination of the spectroscopic parameters of beauty-partners of  $T_{cc}$  from QCD**  
ALIYEV T., SAVCI M., BİLMİŞ S.  
Physical Review D, vol.105, no.7, 2022 (SCI-Expanded)
- X. **Light-cone sum rules for radial excitation of decuplet to octet baryons electromagnetic transition form factors**  
ALIYEV T., BİLMİŞ S., Savci M.  
MODERN PHYSICS LETTERS A, vol.36, no.34, 2021 (SCI-Expanded)
- XI. **Strong and electromagnetic decays of the radially excited D-s and B-s mesons in light cone QCD sum rules**  
BİLMİŞ S.  
EUROPEAN PHYSICAL JOURNAL C, vol.81, no.10, 2021 (SCI-Expanded)
- XII. **Semileptonic baryon decays in the light cone QCD sum rules**  
ALIYEV T., BİLMİŞ S., SAVCI M.  
Physical Review D, vol.104, no.5, 2021 (SCI-Expanded)
- XIII.  **$\gamma^* N \rightarrow \Delta^+ (1600)$  transition form factors in light-cone sum rules**  
Aliiev T., Barakat T., Bilmis S., Savci M.  
Physical Review D, vol.101, no.11, 2020 (SCI-Expanded)
- XIV. **Multipole moments of heavy vector and axial-vector mesons in QCD**  
Aliiev T., Bilmis S., Savci M.  
Physical Review D, vol.101, no.5, 2020 (SCI-Expanded)
- XV. **Are the new excited  $\omega_c$  baryons negative parity states?**

- Aliev T., Bilmiş S., Savcı M.  
Modern Physics Letters A, vol.35, no.1, 2020 (SCI-Expanded)
- XVI. **The Belle II physics book**  
Kou E., Urquijo P., Altmannshofer W., Beaujean F., Bell G., Beneke M., Bigi I. I., Bishara F., Blanke M., Bobeth C., et al.  
Progress of Theoretical and Experimental Physics, vol.2019, no.12, 2019 (SCI-Expanded)
- XVII. **Properties of excited B-c states in QCD**  
Aliev T., Barakat T., BİLMİŞ S.  
NUCLEAR PHYSICS B, vol.947, 2019 (SCI-Expanded)
- XVIII. **The mass and residues of radially and orbitally excited doubly heavy baryons in QCD**  
Aliev T., BİLMİŞ S.  
NUCLEAR PHYSICS A, vol.984, pp.99-111, 2019 (SCI-Expanded)
- XIX. **Determination of  $f(0) - a(0)(0)$  mixing angle from QCD sum rules**  
ALİYEV T., BİLMİŞ S.  
EUROPEAN PHYSICAL JOURNAL A, vol.54, no.9, 2018 (SCI-Expanded)
- XX. **Light-cone distribution amplitudes of light  $J(PC)=2(--)$  tensor mesons in QCD**  
Alyev T., Bilmiş S., Yang K.  
NUCLEAR PHYSICS B, vol.931, pp.132-145, 2018 (SCI-Expanded)
- XXI. **Reanalysis of  $\Omega(c) \rightarrow \Xi K^+(c)$ - Decay in QCD**  
ALİYEV T., BİLMİŞ S., SAVCI M.  
ADVANCES IN HIGH ENERGY PHYSICS, vol.2018, 2018 (SCI-Expanded)
- XXII. **Scalar unparticle signals at the LHC**  
ALİYEV T., BİLMİŞ S., Solmaz M., TURAN İ.  
PHYSICAL REVIEW D, vol.95, no.9, 2017 (SCI-Expanded)
- XXIII. **Strong Coupling Constants of Negative Parity Heavy Baryons with  $\pi$  and K Mesons**  
ALİYEV T., BİLMİŞ S., SAVCI M.  
ADVANCES IN HIGH ENERGY PHYSICS, vol.2017, 2017 (SCI-Expanded)
- XXIV. **Analysis of Radial Excitations of Octet Baryons in QCD Sum Rules**  
ALİYEV T., BİLMİŞ S.  
ADVANCES IN HIGH ENERGY PHYSICS, vol.2017, 2017 (SCI-Expanded)
- XXV. **Constraints on dark photon from neutrino-electron scattering experiments**  
BİLMİŞ S., TURAN İ., Aliev T., Deniz M., Singh L., Wong H. T.  
PHYSICAL REVIEW D, vol.92, no.3, 2015 (SCI-Expanded)
- XXVI. **Constraints on a noncommutative physics scale with neutrino-electron scattering**  
Bilmiş S., Deniz M., Li H. B., Li J., Liao H. Y., Lin S. T., Singh V., Wong H. T., Yildirim I. O., Yue Q., et al.  
PHYSICAL REVIEW D, vol.85, no.7, 2012 (SCI-Expanded)
- XXVII. **Constraints on nonstandard neutrino interactions and unparticle physics with  $(\nu)$  over bar  $(e)-e(-)$  scattering at the Kuo-Sheng nuclear power reactor**  
Deniz M., Bilmiş S., Yildirim I. O., Li H. B., Li J., Liao H. Y., Lin C. W., Lin S. T., SERİN M., Singh V., et al.  
PHYSICAL REVIEW D, vol.82, no.3, 2010 (SCI-Expanded)
- XXVIII. **Measurement of  $(\nu)$  over bar  $(e)-e$  scattering cross section with a CsI(Tl) scintillating crystal array at the Kuo-Sheng nuclear power reactor**  
Deniz M., Lin S. T., Singh V., Li J., Wong H. T., Bilmiş S., Chang C. Y., Chang H. M., Chang W. C., Chen C. P., et al.  
PHYSICAL REVIEW D, vol.81, no.7, 2010 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Properties of doubly heavy baryons in QCD**  
Aliev T., BİLMİŞ S.  
TURKISH JOURNAL OF PHYSICS, vol.46, no.1, pp.1-26, 2022 (ESCI)
- II. **Mixing angles between the tetraquark states with two heavy quarks within QCDsum rules**

BİLMİŞ S.

Turkish Journal of Physics, vol.45, no.6, pp.390-399, 2021 (ESCI)

## Refereed Congress / Symposium Publications in Proceedings

- I. **LIGHT-CONE DISTRIBUTION AMPLITUDES OF LIGHT  $J(PC)=2(--)$  TENSOR MESONS IN QCD**  
Aliev T., BİLMİŞ S., Yang K. C.  
6th International Conference on Control and Optimization with Industrial Applications (COIA), Baku, Azerbaijan, 11 - 13 July 2018, pp.68-70
- II. **Constraining Dark Photon via Neutrino Electron Scattering Experiments**  
BİLMİŞ S., TURAN İ., ALİYEV T., DENİZ M., Singh L., Wong H. T.  
Institute for Research in Fundamental Sciences (IPM), Tahran, Iran, 22 - 27 January 2016
- III. **Unparticle Signals at LHC**  
ALİYEV T., BİLMİŞ S., solmaz M., TURAN İ.  
ICTP-ECAR, Turkey, 29 September - 03 October 2015
- IV. **Final results of  $\bar{\nu}e - e$  scattering cross-section measurements and constraints on new physics**  
Deniz M., Bilmis S., Wong H. T.  
12th International Conference on Topics in Astroparticle and Underground Physics, TAUP 2011, Munich, Germany, 5 - 09 September 2011, vol.375
- V. **Measurement of  $\bar{\nu}e-e$  scattering cross-section and constraints on new physics with a CsI(Tl) crystal array at the Kuo-Sheng reactor laboratory**  
Deniz M., BİLMİŞ S., Wong H. T.  
21st International Europhysics Conference on High Energy Physics, EPS-HEP 2011, Grenoble, RhoneAlpes, France, 21 - 27 July 2011

## Supported Projects

ALİYEV T., ŞİMŞEK K., SAVCI M., TURAN İ., BİLMİŞ S., Project Supported by Higher Education Institutions, İki Ağır Kuarktan Oluşan Baryon Sisteminin Özelliklerinin LHC Deneyinde Araştırılması, 2018 - 2019

ALİYEV T., TURAN İ., BİLMİŞ S., Project Supported by Higher Education Institutions, Fermiyonik Aparçacıklarının Özelliklerinin İncelenmesi ve Deneysel İzleri, 2017 - 2017

SAVCI M., BİLMİŞ S., Project Supported by Higher Education Institutions, Negatif pariteli mezon ve baryonların radiatif geçişleri, multipole manyetik momentlerinin incelenmesi, 2017 - 2017

TURAN İ., BİLMİŞ S., Project Supported by Higher Education Institutions, Standart Model Ötesi Fiziğin Büyük Hadron Çarpıştırıcısı'nda Araştırılması, 2013 - 2015

## Metrics

Publication: 35

Citation (WoS): 637

Citation (Scopus): 561

H-Index (WoS): 8

H-Index (Scopus): 9

## Non Academic Experience

TÜBİTAK