

# **Prof. ALİ MURAT GÜLER**

## **Personal Information**

**Fax Phone:** [+90 312 210 5099](tel:+903122105099)

**Email:** amg@metu.edu.tr

**Web:** <https://avesis.metu.edu.tr/amg>

## **International Researcher IDs**

ScholarID: rTljvlwAAAAJ

ORCID: 0000-0001-5692-2694

Publons / Web Of Science ResearcherID: ABB-3382-2020

ScopusID: 26435242300

Yoksis Researcher ID: 9597

## **Education Information**

Doctorate, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, Turkey 1997 - 2000

Postgraduate, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, Turkey 1994 - 1997

Undergraduate, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, Turkey 1989 - 1994

## **Foreign Languages**

English, C1 Advanced

## **Research Areas**

Physics, Basic Particles and Areas, Properties of special particles, Natural Sciences

## **Academic Titles / Tasks**

Professor, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 2010 - Continues

Associate Professor, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 2007 - 2010

Assistant Professor, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 2004 - 2007

Lecturer PhD, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 2003 - 2004

Lecturer PhD, Nagoya University, Science Faculty, Physics Department, 2000 - 2002

Research Assistant, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 1994 - 2000

## **Advising Theses**

Güler A. M., Differential cross section measurement of gamma + b jets at 13 teV at CMS at LHC, Doctorate,

M.YALVAÇ(Student), 2024

Güler A. M., Analysis of Emulsion RUN0 data of the SND@LHC experiment at the CERN-LHC, Postgraduate,

E.YAMAN(Student), 2023

Güler A. M., Alignment study of scintillating fiber modules of the SND@LHC experiment at CERN, Postgraduate, C.YAZICI(Student), 2023

GÜLER A. M., Calculation of kinematic dependent variables for trilinear higgs coupling determination via single-higgs differential measurements at the CMS experiment at the LHC, Postgraduate, Ö.DURMUŞ(Student), 2022

GÜLER A. M., Study of charmed hadrons lifetime with 400 gev protons at the CERN-SPS, Postgraduate, C.ÖZ(Student), 2022

GÜLER A. M., Design and implementation of a low emittance high power thermionic DC electron gun, Postgraduate, M.MURAT(Student), 2021

Güler A. M., SENSITIVITY OF THE SHIP EXPERIMENT TO HIDDEN PARTICLES AT THE CERN SPS, Postgraduate, A.Akmete(Student), 2020

Güler A. M., Searching for neutral kaons in the ship test beam data, Postgraduate, O.Durhan(Student), 2020

GÜLER A. M., OPERA Dedektöründeki Nötrino-Kurşun Yüklü Akım Etkileşmelerinde Hadron Çokluk Dağılımlarının İncelenmesi, Doctorate, Ç.KAMIŞCIOĞLU(Student), 2017

GÜLER A. M., Study of misalignment effects in the CMS forward hadron calorimeter, Postgraduate, C.KILINÇ(Student), 2016

GÜLER A. M., Search for pair production of a heavy quark decaying into top quark and photon in semi-leptonic channel with the CMS detector in the LHC, Postgraduate, E.AŞILAR(Student), 2014

GÜLER A. M., Neutrino interaction with an automatic scanning system in the OPERA environment, Postgraduate, B.Hosseini(Student), 2012

GÜLER A. M., Analysis of neutrino interactions in the OPERA experiment, Postgraduate, M.KAMIŞCIOĞLU(Student), 2012

GÜLER A. M., Geant4 based Monte Carlo simulation for carbon fragmentation in nuclear emulsion, Postgraduate, N.HOSSEINI(Student), 2012

GÜLER A. M., Neutrino interaction analysis with an automatic scanning system in the OPERA experiment, Postgraduate, B.HOSSEİNİ(Student), 2012

GÜLER A. M., Measurement of differential photon-jet cross section from 7 TeV PP collisions in the CMS experiment at the LHC, Doctorate, K.ÖCALAN(Student), 2012

GÜLER A. M., High speed automatic scanning systems for emulsion analysis in the opera experiment, Postgraduate, Ö.Altınok(Student), 2011

GÜLER A. M., Study of beam-halo events in photon production in the CMS experiment, Postgraduate, E.YILDIRIM(Student), 2011

GÜLER A. M., High-speed automatic scanning system for emulsion analysis in the OPERA experiment, Postgraduate, Ö.ALTINOK(Student), 2011

GÜLER A. M., Search for supersymmetry in jet topologies with the CMS detector, Postgraduate, K.ÖCALAN(Student), 2009

GÜLER A. M., D0 background to neutrino oscillations in the OPERA experiment, Postgraduate, S.TUFANLI(Student), 2009

GÜLER A. M., Do background to neutrino oscillations in the opera experiment, Postgraduate, S.Tufanlı(Student), 2009

GÜLER A. M., Study of electron identification in the opera detector, Postgraduate, M.FATİH(Student), 2008

GÜLER A. M., Study of neutrino interactions in the CHORUS experiment, Postgraduate, V.ÇUHA(Student), 2006

GÜLER A. M., Antineutrino charm production and pentaquark search in the CHORUS experiment, Doctorate, U.KÖSE(Student), 2006

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

- I. Results and Perspectives from the First Two Years of Neutrino Physics at the LHC by the SND@LHC Experiment  
Abbaneo D., Ahmad S., Albanese R., Alexandrov A., Alicante F., Androsov K., Anokhina A., Asada T., Asawatangtrakuldee C., Ayala Torres M., et al.  
*Symmetry*, vol.16, no.6, 2024 (SCI-Expanded)
- II. Reconstruction of 400 GeV/c proton interactions with the SHiP-charm project  
Ahdida C., Akmete A., Albanese R., Alexandrov A., Alicante F., Alt J., Aoki S., Arduini G., Back J., Dos Santos F. B., et al.

- European Physical Journal C, vol.84, no.6, 2024 (SCI-Expanded)
- III. SND@LHC: the scattering and neutrino detector at the LHC**  
 Acampora G., Ahdida C., Albanese R., Albrecht C., Alexandrov A., Andreini M., Anokhina A., Asada T., Auberson N., Baldanza C., et al.  
*Journal of Instrumentation*, vol.19, no.5, 2024 (SCI-Expanded)
- IV. Measurement of the muon flux at the SND@LHC experiment**  
 Albanese R., Alexandrov A., Alicante F., Anokhina A., Asada T., Battilana C., Bay A., Betancourt C., Bick D., Biswas R., et al.  
*European Physical Journal C*, vol.84, no.1, 2024 (SCI-Expanded)
- V. Development of proton beam irradiation system for the NA65/DsTau experiment**  
 Aoki S., Ariga A., Ariga T., Charitonidis N., Dmitrievsky S., Dobre R., Firu E., Gornushkin Y., Güler A. M., Hayakawa D., et al.  
*JOURNAL OF INSTRUMENTATION*, vol.18, no.10, 2023 (SCI-Expanded)
- VI. Observation of Collider Muon Neutrinos with the SND@LHC Experiment**  
 Albanese R., Alexandrov A., Alicante F., Anokhina A., Asada T., Battilana C., Bay A., Betancourt C., Biswas R., Blanco Castro A., et al.  
*PHYSICAL REVIEW LETTERS*, vol.131, no.3, 2023 (SCI-Expanded)
- VII. Directional sensitivity of the NEWSdm experiment to cosmic ray boosted dark matter**  
 Agafonova N., Alexandrov A., Anokhina A., Asada T., Ashikhmin V., Boccia V., Centanni D., Chernyavskii M., D'Ambrosio N., De Lellis G., et al.  
*Journal of Cosmology and Astroparticle Physics*, vol.2023, no.7, 2023 (SCI-Expanded)
- VIII. Updated constraints on sterile neutrino mixing in the OPERA experiment using a new ν e identification method**  
 Agafonova N., Alexandrov A., Anokhina A., Aoki S., Ariga A., Ariga T., Bertolin A., Bozza C., Brugnera R., Buontempo S., et al.  
*Progress of Theoretical and Experimental Physics*, vol.2023, no.3, 2023 (SCI-Expanded)
- IX. The SHiP experiment at the proposed CERN SPS Beam Dump Facility**  
 Ahdida C., Akmete A., Albanese R., Alt J., Alexandrov A., Anokhina A., Aoki S., Arduini G., Atkin E., Azorskiy N., et al.  
*EUROPEAN PHYSICAL JOURNAL C*, vol.82, no.5, 2022 (SCI-Expanded)
- X. Track reconstruction and matching between emulsion and silicon pixel detectors for the SHiP-charm experiment**  
 Ahdida C., Akmete A., Albanese R., Alt J., Alexandrov A., Anokhina A., Aoki S., Arduini G., Atkin E., Azorskiy N., et al.  
*JOURNAL OF INSTRUMENTATION*, vol.17, no.3, 2022 (SCI-Expanded)
- XI. OPERA tau neutrino charged current interactions**  
 Agafonova N., Alexandrov A., Anokhina A., Aoki S., Ariga A., Ariga T., Bertolin A., Bozza C., Brugnera R., Buonaura A., et al.  
*SCIENTIFIC DATA*, vol.8, no.1, 2021 (SCI-Expanded)
- XII. Sensitivity of the SHiP experiment to dark photons decaying to a pair of charged particles**  
 Ahdida C., Akmete A., Albanese R., Alexandrov A., Anokhina A., Aoki S., Arduini G., Atkin E., Azorskiy N., Back J., et al.  
*EUROPEAN PHYSICAL JOURNAL C*, vol.81, no.5, 2021 (SCI-Expanded)
- XIII. Sensitivity of the SHiP experiment to light dark matter**  
 Ahdida C., Akmete A., Albanese R., Alexandrov A., Anokhina A., Aoki S., Arduini G., Atkin E., Azorskiy N., Back J., et al.  
*JOURNAL OF HIGH ENERGY PHYSICS*, vol.2021, no.4, 2021 (SCI-Expanded)
- XIV. First observation of a tau neutrino charged current interaction with charm production in the OPERA experiment: OPERA Collaboration**  
 Agafonova N., Aleksandrov A., Anokhina A., Aoki S., Ariga A., Ariga T., Bertolin A., Bozza C., Brugnera R., Buonaura A., et al.  
*European Physical Journal C*, vol.80, no.8, 2020 (SCI-Expanded)
- XV. Measurement of the muon flux from 400 GeV/c protons interacting in a thick molybdenum/tungsten target**  
 Ahdida C., Akmete A., Albanese R., Alexandrov A., Anokhina A., Aoki S., Arduini G., Atkin E., Azorskiy N., Back J. J., et al.

- al.  
 EUROPEAN PHYSICAL JOURNAL C, vol.80, no.3, 2020 (SCI-Expanded)
- XVI. **DsTau: study of tau neutrino production with 400 GeV protons from the CERN-SPS**  
 Aoki S., Ariga A., Ariga T., Dmitrievsky S., Firu E., Forshaw D., Fukuda T., Gornushkin Y., GÜLER A. M., Haiduc M., et al.  
 JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.1, 2020 (SCI-Expanded)
- XVII. **The magnet of the scattering and neutrino detector for the SHiP experiment at CERN**  
 Ahdida C., Albanese R., Alexandrov A., Anokhina A., Aoki S., Arduini G., Atkin E., Azorskiy N., Back J. J., Bagulya A., et al.  
 JOURNAL OF INSTRUMENTATION, vol.15, no.1, 2020 (SCI-Expanded)
- XVIII. **Fast simulation of muons produced at the SHiP experiment using Generative Adversarial Networks**  
 Ahdida C., Albanese R., Alexandrov A., Anokhina A., Aoki S., Arduini G., Atkin E., Azorskiy N., Back J. J., Bagulya A., et al.  
 JOURNAL OF INSTRUMENTATION, vol.14, 2019 (SCI-Expanded)
- XIX. **Measurement of the cosmic ray muon flux seasonal variation with the OPERA detector**  
 Agafonova N., Alexandrov A., Anokhina A., Aoki S., Ariga A., Ariga T., Bertolin A., Bozza C., Brugnera R., Buonaura A., et al.  
 Journal of Cosmology and Astroparticle Physics, vol.2019, no.10, 2019 (SCI-Expanded)
- XX. **Final results on neutrino oscillation parameters from the OPERA experiment in the CNGS beam**  
 Agafonova N., Alexandrov A., Anokhina A., Aoki S., Ariga A., Ariga T., Bertolin A., Bozza C., Brugnera R., Buontempo S., et al.  
 Physical Review D, vol.100, no.5, 2019 (SCI-Expanded)
- XXI. **Sensitivity of the SHiP experiment to Heavy Neutral Leptons**  
 Ahdida C., Albanese R., Alexandrov A., Anokhina A., Aoki S., Arduini G., Atkin E., Azorskiy N., Dos Santos F. B., Back J. J., et al.  
 JOURNAL OF HIGH ENERGY PHYSICS, vol.2019, no.4, 2019 (SCI-Expanded)
- XXII. **The experimental facility for the Search for Hidden Particles at the CERN SPS**  
 Ahdida C., Albanese R., Alexandrov A., Anokhina A., Aoki S., Arduini G., Atkin E., Azorskiy N., Back J. J., Bagulya A., et al.  
 JOURNAL OF INSTRUMENTATION, vol.14, 2019 (SCI-Expanded)
- XXIII. **Results from the OPERA Experiment in the CNGS Beam**  
 Paoloni A., Agafonova N., Alexandrov A., Anokhina A., Aoki S., Ariga A., Ariga T., Bertolin A., Bozza C., Brugnera R., et al.  
 UNIVERSE, vol.4, no.12, 2018 (SCI-Expanded)
- XXIV. **Discovery potential for directional Dark Matter detection with nuclear emulsions**  
 Agafonova N., Aleksandrov A., Anokhina A., Asada T., Ashikhmin V. V., Bodnarchuk I., Buonaura A., Chernyavskii M., Chukanov A., D'Ambrosio N., et al.  
 EUROPEAN PHYSICAL JOURNAL C, vol.78, no.7, 2018 (SCI-Expanded)
- XXV. **Final results of the search for  $\nu(\mu) \rightarrow \nu(e)$  oscillations with the OPERA detector in the CNGS beam**  
 Agafonova N., Aleksandrov A., Anokhina A., Aoki S., Ariga A., Ariga T., Bertolin A., Bozza C., Brugnera R., Buonaura A., et al.  
 JOURNAL OF HIGH ENERGY PHYSICS, no.6, 2018 (SCI-Expanded)
- XXVI. **Final Results of the OPERA Experiment on  $\nu(\tau)$  Appearance In the CNGS Neutrino Beam**  
 Agafonova N., Aleksandrov A., Anokhina A., Aoki S., Ariga A., Ariga T., Bertolin A., Bozza C., Brugnera R., Buonaura A., et al.  
 PHYSICAL REVIEW LETTERS, vol.120, no.21, 2018 (SCI-Expanded)
- XXVII. **Study of charged hadron multiplicities in charged-current neutrino-lead interactions in the OPERA detector**  
 Agafonova N., Aleksandrov A., Anokhina A., Aoki S., Ariga A., Ariga T., Bertolin A., Bodnarchuk I., Bozza C., Brugnera R., et al.  
 EUROPEAN PHYSICAL JOURNAL C, vol.78, no.1, 2018 (SCI-Expanded)

- XXVIII. Brightness and uniformity measurements of plastic scintillator tiles at the CERN H2 test beam**  
 Chatrchyan S., Sirunyan A. M., Tumasyan A., Litomin A., Mossolov V., Shumeiko N., Van de Klundert M., Van Haevermaet H., Van Mechelen P., Van Spilbeeck A., et al.  
*JOURNAL OF INSTRUMENTATION*, vol.13, 2018 (SCI-Expanded)
- XXIX. Radioactive source calibration test of the CMS Hadron Endcap Calorimeter test wedge with Phase I upgrade electronics**  
 Chatrchyan S., Sirunyan A. M., Tumasyan A., Litomin A., Mossolov V., Shumeiko N., De Klundert M. V., Van Haevermaet H., Van Mechelen P., Van Spilbeeck A., et al.  
*JOURNAL OF INSTRUMENTATION*, vol.12, 2017 (SCI-Expanded)
- XXX. The active muon shield in the SHiP experiment**  
 Akmete A., Alexandrov A., Anokhina A., Aoki S., Atkin E., Azorskiy N., Back J. J., Bagulya A., Baranov A., Barker G. J., et al.  
*JOURNAL OF INSTRUMENTATION*, vol.12, 2017 (SCI-Expanded)
- XXXI. Readout technologies for directional WIMP Dark Matter detection**  
 Battat J. B. R., Irastorza I. G., Aleksandrov A., Asada T., Baracchini E., Billard J., Bosson G., Bourrion O., Bouvier J., Buonaura A., et al.  
*PHYSICS REPORTS-REVIEW SECTION OF PHYSICS LETTERS*, vol.662, pp.1-46, 2016 (SCI-Expanded)
- XXXII. Dose rate effects in the radiation damage of the plastic scintillators of the CMS hadron endcap calorimeter**  
 Khachatryan V., Sirunyan A., Tumasyan A., Litomin A., Mossolov V., Shumeiko N., Klundert M. V. D., Haevermaet H. V., Mechelen P. V., Spilbeeck A. V., et al.  
*Journal of Instrumentation*, vol.11, no.10, 2016 (SCI-Expanded)
- XXXIII. Determination of the muon charge sign with the dipolar spectrometers of the OPERA experiment**  
 Agafonova N., Aleksandrov A., Anokhina A., Aoki S., Ariga A., Ariga T., Bender D., Bertolin A., Bozza C., Brugnera R., et al.  
*JOURNAL OF INSTRUMENTATION*, vol.11, 2016 (SCI-Expanded)
- XXXIV. Discovery of tau Neutrino Appearance in the CNGS Neutrino Beam with the OPERA Experiment**  
 Agafonova N., Aleksandrov A., Anokhina A., Aoki S., Ariga A., Ariga T., Bender D., Bertolin A., Bodnarchuk I., Bozza C., et al.  
*PHYSICAL REVIEW LETTERS*, vol.115, no.12, 2015 (SCI-Expanded)
- XXXV. Limits on muon-neutrino to tau-neutrino oscillations induced by a sterile neutrino state obtained by OPERA at the CNGS beam**  
 Agafonova N., Aleksandrov A., Anokhina A., Aoki S., Ariga A., Ariga T., Bender D., Bertolin A. G., Bodnarchuk I., Bozza C., et al.  
*JOURNAL OF HIGH ENERGY PHYSICS*, no.6, 2015 (SCI-Expanded)
- XXXVI. Observation of tau neutrino appearance in the CNGS beam with the OPERA experiment**  
 Agafonova N., Aleksandrov A., Anokhina A., Aoki S., Ariga A., Ariga T., Asada T., Bender D., Bertolin A., Bozza C., et al.  
*PROGRESS OF THEORETICAL AND EXPERIMENTAL PHYSICS*, no.10, 2014 (SCI-Expanded)
- XXXVII. Procedure for short-lived particle detection in the OPERA experiment and its application to charm decays**  
 Agafonova N., Aleksandrov A., Anokhina A., Aoki S., Ariga A., Ariga T., Bender D., Bertolin A., Bozza C., Brugnera R., et al.  
*EUROPEAN PHYSICAL JOURNAL C*, vol.74, no.8, 2014 (SCI-Expanded)
- XXXVIII. Evidence for nu(mu) -> nu(tau) appearance in the CNGS neutrino beam with the OPERA experiment**  
 Agafonova N., Aleksandrov A., Anokhina A., Aoki S., Ariga A., Ariga T., Asada T., Autiero D., Ben Dhahbi A., Badertscher A., et al.  
*PHYSICAL REVIEW D*, vol.89, no.5, 2014 (SCI-Expanded)
- XXXIX. New results on nu(mu) -> nu(tau) appearance with the OPERA experiment in the CNGS beam**  
 Agafonova N., Aleksandrov A., Anokhina A., Aoki S., Ariga A., Ariga T., Asada T., Autiero D., Badertscher A., Ben Dhahbi A., et al.  
*JOURNAL OF HIGH ENERGY PHYSICS*, no.11, 2013 (SCI-Expanded)

- XL. **Search for nu(mu) -> nu(e) oscillations with the OPERA experiment in the CNGS beam**  
 Agafonova N., Aleksandrov A., Anokhina A., Aoki S., Ariga A., Ariga T., Autiero D., Badertscher A., Ben Dhahbi A., Bertolin A., et al.  
 JOURNAL OF HIGH ENERGY PHYSICS, no.7, 2013 (SCI-Expanded)
- XLI. **Measurement of the neutrino velocity with the OPERA detector in the CNGS beam using the 2012 dedicated data**  
 Adam T., Agafonova N., Aleksandrov A., Anokhina A., Aoki S., Ariga A., Ariga T., Autiero D., Badertscher A., Ben Dhahbi A., et al.  
 JOURNAL OF HIGH ENERGY PHYSICS, vol.2013, no.1, 2013 (SCI-Expanded)
- XLII. **Measurement of the neutrino velocity with the OPERA detector in the CNGS beam**  
 Adam T., Agafonova N., Aleksandrov A., Altinok O., Sanchez P. A., Anokhina A., Aoki S., Ariga A., Ariga T., Autiero D., et al.  
 JOURNAL OF HIGH ENERGY PHYSICS, no.10, 2012 (SCI-Expanded)
- XLIII. **Observation of a new boson at a mass of 125 GeV with the CMS experiment at the LHC**  
 Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Erof J., Fabjan C., et al.  
 PHYSICS LETTERS B, no.1, pp.30-61, 2012 (SCI-Expanded)
- XLIV. **Search for ν μ → ν τ oscillation with the OPERA experiment in the CNGS beam**  
 Agafonova N., Aleksandrov A., Altinok O., Anokhina A., Aoki S., Ariga A., Ariga T., Autiero D., Badertscher A., Bagulya A., et al.  
 New Journal of Physics, vol.14, 2012 (SCI-Expanded)
- XLV. **Momentum measurement by the multiple Coulomb scattering method in the OPERA lead-emulsion target**  
 Agafonova N., Aleksandrov A., Altinok O., Anokhina A., Aoki S., Ariga A., Ariga T., Autiero D., Badertscher A., Bagulya A., et al.  
 NEW JOURNAL OF PHYSICS, vol.14, 2012 (SCI-Expanded)
- XLVI. **Study of neutrino interactions with the electronic detectors of the OPERA experiment**  
 Agafonova N., Aleksandrov A., Altinok O., Anokhina A., Aoki S., Ariga A., Ariga T., Autiero D., Badertscher A., Bagulya A., et al.  
 NEW JOURNAL OF PHYSICS, vol.13, 2011 (SCI-Expanded)
- XLVII. **Observation of a first ν(τ) candidate event in the OPERA experiment in the CNGS beam**  
 Agafonova N., Aleksandrov A., Altinok O., Ambrosio M., Anokhina A., Aoki S., Ariga A., Ariga T., Autiero D., Badertscher A., et al.  
 PHYSICS LETTERS B, vol.691, no.3, pp.138-145, 2010 (SCI-Expanded)
- XLVIII. **Study of various photomultiplier tubes with muon beams and Cerenkov light produced in electron showers**  
 Chatrchyan S., Khachatryan V., Sirunyan A. M., Mossolov V., Shumeiko N., De Wolf E. A., Ochesanu S., Roland B., Van Haevermaet H., Van Mechelen P., et al.  
 JOURNAL OF INSTRUMENTATION, vol.5, 2010 (SCI-Expanded)
- XLIX. **Measurement of the atmospheric muon charge ratio with the OPERA detector**  
 Agafonova N., Anokhina A., Aoki S., Ariga A., Ariga T., Autiero D., Badertscher A., Bagulya A., Bertolin A., Besnier M., et al.  
 EUROPEAN PHYSICAL JOURNAL C, vol.67, pp.25-37, 2010 (SCI-Expanded)
- L. **The detection of neutrino interactions in the emulsion/lead target of the OPERA experiment**  
 Agafonova N., Anokhina A., Aoki S., Ariga A., Ariga T., Arrabito L., Autiero D., Badertscher A., Bagulya A., Gregg F. B., et al.  
 JOURNAL OF INSTRUMENTATION, vol.4, 2009 (SCI-Expanded)
- LI. **The OPERA experiment in the CERN to Gran Sasso neutrino beam**  
 Acquaferda R., Adam T., Agafonova N., Sanchez P. A., Ambrosio M., Anokhina A., Aoki S., Ariga A., Ariga T., Arrabito L., et al.  
 JOURNAL OF INSTRUMENTATION, vol.4, 2009 (SCI-Expanded)

- LII. **Design, performance, and calibration of the CMS hadron-outer calorimeter**  
 Abdullin S., Abramov V., Acharya B., Adam N., Adams M., Akchurin N., Akgun U., Albayrak E., Anderson E. W., Antchev G., et al.  
 EUROPEAN PHYSICAL JOURNAL C, vol.57, no.3, pp.653-663, 2008 (SCI-Expanded)
- LIII. **Leading order analysis of neutrino induced dimuon events in the CHORUS experiment**  
 Kayis-Topaksu A., Onengut G., van Dantzig R., de Jong M., Oldeman R. G. C., Guler A., Kama S., Kose U., Serin-Zeyrek M., Tolun P., et al.  
 NUCLEAR PHYSICS B, vol.798, pp.1-16, 2008 (SCI-Expanded)
- LIV. **Emulsion sheet doublets as interface trackers for the OPERA experiment**  
 Anokhina A., Aoki S., Ariga A., Arrabito L., Autiero D., Badertscher A., Bay F., Greggio F. B., Bertolin A., Besnier M., et al.  
 JOURNAL OF INSTRUMENTATION, vol.3, 2008 (SCI-Expanded)
- LV. **Final results on  $\nu<\sub>\mu</sub>\rightarrow\nu<\sub>\tau</sub>$  oscillation from the CHORUS experiment**  
 EŞKUT E., KAYIŞ TOPAKSU A., Oenenguet G., van Beuzekom M. G., van Dantzig R., de Jong M., Konijn J., Melzer O., Oldeman R. G. C., Pesen E., et al.  
 NUCLEAR PHYSICS B, no.1-2, pp.326-343, 2008 (SCI-Expanded)
- LVI. **Study of the effects induced by lead on the emulsion films of the OPERA experiment**  
 Anokhina A., Aoki S., Ariga A., Arrabito L., Autiero D., Badertscher A., Bay F., Bergnoli A., Greggio F. B., Besnier M., et al.  
 JOURNAL OF INSTRUMENTATION, vol.3, 2008 (SCI-Expanded)
- LVII. **Associated charm production in neutrino-nucleus interactions**  
 Kayis-Topaksu A., Oenenguet G., van Dantzig R., de Jong M., Oldeman R. G. C., Gueler M., Kose U., Tolun P., Catanesi M. G., Muciaccia M. T., et al.  
 EUROPEAN PHYSICAL JOURNAL C, no.3, pp.543-552, 2007 (SCI-Expanded)
- LVIII. **Search for charmed pentaquarks in high energy anti-neutrino interactions**  
 De Lellis G., Gueler A. M., Kawada J., Kose U., Sato O., Tramontano F.  
 NUCLEAR PHYSICS B, vol.763, pp.268-282, 2007 (SCI-Expanded)
- LIX. **Charged-particle multiplicities in charged-current neutrino and anti-neutrino-nucleus interactions**  
 KAYIŞ TOPAKSU A., Onengut G., van Dantzig R., de Jong M., Oldeman R. G. C., Guler M., Kose U., Tolun P., Catanesi M. G., Muciaccia M. T., et al.  
 EUROPEAN PHYSICAL JOURNAL C, vol.51, no.4, pp.775-785, 2007 (SCI-Expanded)
- LX. **First events from the CNGS neutrino beam detected in the OPERA experiment**  
 Acquaferro R., Agafonova N., Ambrosio M., Anokhina A., Aoki S., Ariga A., Arrabito L., Autiero D., Badertscher A., Baussan E., et al.  
 NEW JOURNAL OF PHYSICS, vol.8, 2006 (SCI-Expanded)
- LXI. **Measurement of nucleon structure functions in neutrino scattering**  
 Onengut G., van Dantzig R., de Jong M., Oldeman R., Guler M., Kama S., Kose U., Serin-Zeyrek M., Tolun P., Catanesi M., et al.  
 PHYSICS LETTERS B, no.1, pp.65-75, 2006 (SCI-Expanded)
- LXII. **Measurement of topological muonic branching ratios of charmed hadrons produced in neutrino-induced charged-current interactions**  
 Kayis-Topaksu A., Onengut G., van Dantzig R., de Jong M., Oldeman R., Guler M., Kose U., Tolun P., Catanesi M., Muciaccia M., et al.  
 PHYSICS LETTERS B, pp.24-34, 2005 (SCI-Expanded)
- LXIII. **Search for superfragments and measurement of the production of hyperfragments in neutrino-nucleus interactions**  
 Onengut G., van Dantzig R., de Jong M., Oldeman R., Guler M., Kose U., Tolun P., Catanesi M., Muciaccia M., Winter K., et al.  
 NUCLEAR PHYSICS B, no.1-2, pp.35-54, 2005 (SCI-Expanded)
- LXIV. **Measurements of  $D<\sup>0</sup>$  production and of decay branching fractions in neutrino-nucleon scattering**

- Onengut G., van Dantzig R., de Jong M., Oldeman R., Guler M., Kose U., Tolun P., Catanesi M., Muciaccia M., Winter K., et al.  
 PHYSICS LETTERS B, no.3-4, pp.105-117, 2005 (SCI-Expanded)
- LXV. Measurement of  $D^*$  production in charged-current neutrino interactions**  
 Onengut G., van Dantzig R., de Jong M., Oldeman R., Guler M., Kose U., Tolun P., Catanesi M., Muciaccia M., de Vyver B., et al.  
 PHYSICS LETTERS B, no.3-4, pp.155-164, 2005 (SCI-Expanded)
- LXVI. Measurement of fragmentation properties of charmed particle production in charged-current neutrino interactions**  
 Onengut G., van Dantzig R., de Jong M., Melzer O., Oldeman R., Pesen E., Visschers J., Guler M., Kose U., Serin-Zeyrek M., et al.  
 PHYSICS LETTERS B, no.3-4, pp.145-156, 2004 (SCI-Expanded)
- LXVII. Measurement of charm production in antineutrino charged-current interactions**  
 Onengut G., van Dantzig R., de Jong M., Melzer O., Oldeman R., Pesen E., Visschers J., Guler M., Kose U., Serin-Zeyrek M., et al.  
 PHYSICS LETTERS B, no.1-2, pp.11-21, 2004 (SCI-Expanded)
- LXVIII. Experimental study of trimuon events in neutrino charged-current interactions**  
 Kayis-Topaksu A., Onengut G., van Dantzig R., de Jong M., Konijn J., Melzer O., Oldeman R., Pesen E., van der Poel C., Visschers J., et al.  
 PHYSICS LETTERS B, no.1-2, pp.44-53, 2004 (SCI-Expanded)
- LXIX. Cross-section measurement for quasi-elastic production of charmed baryons in  $\nu N$  interactions**  
 Kayis-Topaksu A., Onengut G., van Dantzig R., de Jong M., Melzer O., Oldeman R., Pesen E., Spada F., Visschers J., Guler M., et al.  
 PHYSICS LETTERS B, no.3-4, pp.198-207, 2003 (SCI-Expanded)
- LXX. Measurement of the  $Z/\Lambda c$  dependence of neutrino charged-current total cross-sections**  
 Kayis-Topaksu A., Onengut G., van Dantzig R., de Jong M., Konijn J., Melzer O., Oldeman R., Pesen E., van der Poel C., Spada F., et al.  
 EUROPEAN PHYSICAL JOURNAL C, no.2, pp.159-167, 2003 (SCI-Expanded)
- LXXI. Measurement of  $\Lambda c$  production in neutrino charged-current interactions**  
 Kayis-Topaksu A., Onengut G., van Dantzig R., de Jong A., Melzer O., Oldeman R., Pesen E., Spada F., Visschers J., Guler M., et al.  
 PHYSICS LETTERS B, no.3-4, pp.156-166, 2003 (SCI-Expanded)
- LXXII. Determination of the semi-leptonic branching fraction of charm hadrons produced in neutrino charged-current interactions**  
 Kayis-Topaksu A., Onengut G., de Jong M., Melzer O., Oldeman R., Pesen E., Spada F., van Dantzig R., Visschers J., Guler M., et al.  
 PHYSICS LETTERS B, vol.549, no.1-2, pp.48-57, 2002 (SCI-Expanded)
- LXXIII. Observation of one event with the characteristics of associated charm production in neutrino charged-current interactions**  
 Kayis-Topaksu A., Onengut G., van Dantzig R., de Jong M., Konijn J., Melzer O., Oldeman R., Pesen E., Visschers J., Guler M., et al.  
 PHYSICS LETTERS B, no.3-4, pp.188-196, 2002 (SCI-Expanded)
- LXXIV. Measurement of  $D^0$  production in neutrino charged-current interactions**  
 Kayis-Topaksu A., Onengut G., van Dantzig R., de Jong M., Melzer O., Oldeman R., Pesen E., Visschers J., Guler M., Serin-Zeyrek M., et al.  
 PHYSICS LETTERS B, no.3-4, pp.173-181, 2002 (SCI-Expanded)
- LXXV. Observation of weak neutral current neutrino production of  $J/\psi$**   
 Eskut E., Kayis-Topaksu A., Onengut G., van Dantzig R., de Jong M., Konijn J., Melzer O., Oldeman R., Pesen E., van der

- Poel C., et al.  
 PHYSICS LETTERS B, no.1-2, pp.1-9, 2001 (SCI-Expanded)
- LXXVI. **New results from a search for  $\nu_e \rightarrow \nu_\mu$  and  $\nu_e \rightarrow \nu_\tau$  oscillation**  
 Eskut E., Kayis-Topaksu A., Onengut G., van Dantzig R., de Jong M., Konijn J., Melzer O., Oldeman R., Pesen E., van der Poel C., et al.  
 PHYSICS LETTERS B, no.1-2, pp.8-22, 2001 (SCI-Expanded)
- LXXVII. **Nuclear emulsions in a large, hybrid experiment (CHORUS) to search for  $\nu_e \rightarrow \nu_\mu$  and  $\nu_e \rightarrow \nu_\tau$  oscillations**  
 Aoki S., Barbuto E., Bozza C., Fabre J., Flegel W., Grella G., Guler M., Hara T., Hoshino K., Ishii Y., et al.  
 NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS  
 DETECTORS AND ASSOCIATED EQUIPMENT, no.3, pp.361-376, 2000 (SCI-Expanded)
- LXXVIII. **Search for  $\nu_e \rightarrow \nu_\mu$  and  $\nu_e \rightarrow \nu_\tau$  oscillation using the  $\tau$  decay modes into a single charged particle**  
 Eskut E., Kayis A., Onengut G., van Dantzig R., de Jong M., Konijn J., Melzer O., Oldeman R., van der Poel C., Uiterwijk J., et al.  
 PHYSICS LETTERS B, no.1-2, pp.205-213, 1998 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Impact of COVID-19 on student performance in a physics laboratory course**  
 Güler A. M., Bilgin B.  
 Social Sciences & Humanities Open, vol.10, no.101121, pp.1-6, 2024 (Scopus)
- II. **More results from the OPERA experiment**  
 Galati G., Agafonova N., Aleksandrov A., Anokhina A., Aoki S., Ariga A., Ariga T., Bender D., Bertolin A., Bodnarchuk I., et al.  
 NUOVO CIMENTO C-COLLOQUIA AND COMMUNICATIONS IN PHYSICS, vol.40, no.5, 2017 (ESCI)
- III. **OPERA neutrino oscillation results**  
 GÜLER A. M.  
 NUOVO CIMENTO C-COLLOQUIA AND COMMUNICATIONS IN PHYSICS, vol.35, no.6, pp.51-55, 2012 (ESCI)

## Refereed Congress / Symposium Publications in Proceedings

- I. **NA65(DsTau): study of tau neutrino production in p-A interactions**  
 Güler A. M.  
 18th International Conference on Topics in Astroparticle and Underground Physics, TAUP 2023, Vienna, Austria,  
 28 August - 01 September 2023, vol.441
- II. **The SND@LHC experiment at CERN**  
 Güler A. M.  
 18th International Conference on Topics in Astroparticle and Underground Physics, TAUP 2023, Vienna, Austria,  
 28 August - 01 September 2023, vol.441
- III. **NA65(DsTau): study of tau neutrino production in p-A interactions**  
 Yuksel E., Güler A. M.  
 The European Physical Society Conference on High Energy Physics, Hamburg, Germany, 21 August 2023, pp.1-6
- IV. **Status of NA65(DsTau) data taking and analysis**  
 Güler A. M.  
 ICHEP2022, Bologna, Italy, 06 July 2022
- V. **DsTau: study of tau neutrino production with nuclear emulsion in the CERN-SPS**  
 GÜLER A. M.

XXVIII International Workshop on Deep-Inelastic Scattering and Related Subjects, New York, United States Of America, 12 April 2021

**VI. Study of tau neutrino production at the CERN SPS**

GÜLER A. M.

13th International Conference on Beauty, Charm and Hyperon Hadrons (BEACH), Peniche, Portugal, 17 - 23 June 2018, vol.1137

**VII. OPERA Deneyi**

KAMIŞCIOĞLU Ç., GÜLER A. M.

2nd International Symposium of Limitless Education And Research, Bodrum, Turkey, 26 - 28 April 2018, vol.1, pp.373-380

**VIII. Nuclear Emulsion Based Detector for Directional Dark Mater Search**

Güler A. M.

TECHNOLOGY AND INSTRUMENTATION IN PARTICLE PHYSICS'17, Beijing, China, 22 - 26 May 2017, no.213, pp.93-96

**IX. Directional Search for Dark Matter Using Nuclear Emulsion**

GÜLER A. M.

The 14th international workshop on the "Dark Side of the Universe 2018", 25 - 29 June 2018

**X. Discovery potential for directional dark matter detection with nuclear emulsions**

GÜLER A. M.

International Conference Frontiers in Theoretical and Applied Physics (FTAPS), Sharjah, United Arab Emirates, 22 - 25 February 2017, vol.869

**XI. SHiP a new facility with a dedicated detector to search for newlong lived neutral particles and studying tau neutrino properties**

GÜLER A. M.

PASCOS 2016: 22ndInternational Symposium onParticles, Strings andCosmology, 10 - 16 July 2016

**XII. NEWS Nuclear Emulsions for WIMP Search**

GÜLER A. M.

PASCOS 2016: 22ndInternational Symposium onParticles, Strings andCosmology, 10 - 16 July 2016

**XIII. The OPERA experiment**

GÜLER A. M., KAMIŞCIOĞLU Ç., KAMIŞCIOĞLU M., Agafonova N., Aleksandrov A., Anokhina A., Aoki S., Ariga A., Bender D.

0th Latin American Symposium on High Energy Physics (SILAFAE 2014), New York, United States Of America, 24 - 28 November 2014, vol.267, pp.87-93

**XIV. SHIP Search for Hidden Particles at CERN**

GÜLER A. M.

IPM school and conference on Particle Physics (IPP15): Neutrino physics, dark matter and B-physics, TAHRAN, Iran, 22 - 27 September 2015

**XV. Performance of Automatic Scanning Microscope for Nuclear Emulsion Experiments**

GÜLER A. M., Altinok O.

International Conference of Computational Methods in Sciences and Engineering (ICCMSE), Athens, Greece, 20 - 23 March 2015, vol.1702

**XVI. Measurement of associated charm production in neutrino-nucleon interactions**

Guler A. M.

Europhysics Conference on High Energy Physics, Manchester, United Kingdom, 19 - 25 July 2007, vol.110

**XVII. Final results of the search for nu(mu) to nu(tau) oscillations by CHORUS**

Guler A. M.

9th International Conference on Topics in Astroparticle and Underground Physics 2005, Zaragoza, Spain, 10 - 14 September 2005, vol.39, pp.313-315

**XVIII. Chorus results on oscillation and charm physics**

Guler A.

32nd International Conference on High Energy Physics, Beijing, China, 16 - 22 August 2004, pp.312-315

## XIX. RECENT RESULTS FROM CHORUS CHARM ANALYSIS

Güler A. M.

38th Rencontres de Moriond on Electroweak Interactions and Unified Theories, Paris, France, 15 March 2003,  
pp.1-6

## XX. Charm production by neutrinos in the CHORUS experiment

Guler A. M.

International Europhysics Conference on High Energy Physics, Budapest, Hungary, 12 July 2001, pp.1-5

## Supported Projects

GÜLER A. M., Project Supported by Higher Education Institutions, CERN-SHIP ALGICI İLE STANDART MODEL ÖTESİ FİZİK İNCELENMESİ, 2017 - 2017

GÜLER A. M., Project Supported by Higher Education Institutions, OPERA DENEYİNDE CHARM ÜRETİMİ VE BOZUNUMU, 2017 - 2017

GÜLER A. M., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2015

GÜLER A. M., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2015

GÜLER A. M., KILINÇ C., Project Supported by Higher Education Institutions, CMS-HF KALORİMETRESİ İÇİN - ÇOK ANOLU FOTOÇOĞANTICILAR, 2013 - 2013

GÜLER A. M., TUBITAK Project, Fast Automatic Scanning System For Emulsion Experiments, 2009 - 2012

GÜLER A. M., Project Supported by Higher Education Institutions, Neutrino Interactions Analysis With An Automatic Scanning System In The Opera Experiment, 2011 - 2011

## Metrics

Publication: 103

Citation (WoS): 8295

Citation (Scopus): 2189

H-Index (WoS): 25

H-Index (Scopus): 25

## Scholarships

Birleştirilmiş Doktora Bursu, TUBITAK, 1997 - 2000

## Awards

Güler A. M., Bilim Teşvik, Tübitak, December 2011

## Non Academic Experience

ORTA DOGU TEKNİK UNIVERSITESI

ORTA DOGU TEKNİK UNIVERSITESI

ORTA DOGU TEKNİK UNIVERSITESI

ORTA DOGU TEKNİK UNIVERSITESI

NAGOYA UNIVERSITESI