

Prof. ALİ MURAT GÜLER

Personal Information

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

Email: amg@metu.edu.tr

Education Information

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

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

Under Graduate, 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, Fen Edebiyat, Fizik, 2010 - Continues

Advising Theses

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, Post Graduate, 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, Post Graduate, E.AŞILAR(Student), 2014

GÜLER A. M. , Geant4 based Monte Carlo simulation for carbon fragmentation in nuclear emulsion, Post Graduate, N.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. , Analysis of neutrino interactions in the OPERA experiment, Post Graduate, M.KAMIŞCIOĞLU(Student), 2012

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

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

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

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

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

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

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

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

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

- **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, 2020 (Journal Indexed in SCI)
- **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, Buonauro A, et al.
Journal of Cosmology and Astroparticle Physics, vol.2019, 2019 (Journal Indexed in SCI Expanded)
- **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, 2019 (Journal Indexed in SCI Expanded)
- **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, 2019 (Journal Indexed in SCI)
- **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 (Journal Indexed in SCI)
- **Discovery potential for directional Dark Matter detection with nuclear emulsions**
Agafonova N, Aleksandrov A, Anokhina A, Asada T, Ashikhmin V. V. , Bodnarchuk I, Buonauro A, Chernyavskii M., Chukanov A, D'Ambrosio N, et al.
EUROPEAN PHYSICAL JOURNAL C, vol.78, 2018 (Journal Indexed in SCI)
- **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, Buonauro A, et al.
JOURNAL OF HIGH ENERGY PHYSICS, 2018 (Journal Indexed in SCI)
- **Final Results of the OPERA Experiment on $\nu(\tau)$ Appearance In the CNGS Neutrino Beam**
Agafonova N, Alexandrov A, Anokhina A, Aoki S, Ariga A, Ariga T, Bertolin A, Bozza C, Brugnera R, Buonauro A, et al.
PHYSICAL REVIEW LETTERS, vol.120, 2018 (Journal Indexed in SCI)
- **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, 2018 (Journal Indexed in SCI)

● **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 Haeuvermaet H., Van Mechelen P., Van Spilbeeck A., et al.

JOURNAL OF INSTRUMENTATION, vol.13, 2018 (Journal Indexed in SCI)

● **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 (Journal Indexed in SCI)

● **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., Buonauro A., et al.

PHYSICS REPORTS-REVIEW SECTION OF PHYSICS LETTERS, vol.662, pp.1-46, 2016 (Journal Indexed in SCI)

● **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, 2015 (Journal Indexed in SCI)

● **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, 2015 (Journal Indexed in SCI)

● **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, 2014 (Journal Indexed in SCI)

● **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, 2014 (Journal Indexed in SCI)

● **Evidence for $\nu(\mu) \rightarrow \nu(\tau)$ 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, 2014 (Journal Indexed in SCI)

● **New results on $\nu(\mu) \rightarrow \nu(\tau)$ 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, 2013 (Journal Indexed in SCI)

● **Search for $\nu(\mu) \rightarrow \nu(e)$ 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, 2013 (Journal Indexed in SCI)

● **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, 2012 (Journal Indexed in SCI)

● **Observation of a first $\nu(\tau)$ 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, pp.138-145, 2010 (Journal Indexed in SCI)

● **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 (Journal Indexed in SCI)

● **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 (Journal Indexed in SCI)

● **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 (Journal Indexed in SCI)

● **First events from the CNGS neutrino beam detected in the OPERA experiment**

Acquafredda 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 (Journal Indexed in SCI)

Refereed Congress / Symposium Publications in Proceedings

● **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

● **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

● **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

● **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

● **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

● **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

● **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

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 ANOTLU FOTOÇOĞANTICILAR, 2013 - 2013

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

Citations

Total Citations (WOS):1010

h-index (WOS):16

Awards

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