Prof. Muammer Altan Çakır

Personal Information

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International Researcher IDs

ORCID: 0000-0002-8627-7689 ScopusID: 35313724900 Yoksis Researcher ID: 219052

Biography

Altan Çakır

Researcher, Ph.D CERN- Associate Professor, Istanbul Technical University (ITU)

Altan Çakır received his M.Sc. degree in theoretical particle physics from Izmir Institute of Technology in 2006 and then went straight as a to graduate school at the Karlsruhe Institute of Technology, Germany, from which he earned a Ph.D. in experimental high energy and particle physics in 2010. During his Ph.D., he was responsible for a scientific research based on new physics searches in the CMS detector at the Large Hadron Collider (LHC) at European Nuclear Research Laboratory (CERN). Thereafter he was granted as a post-doctoral research fellow at Deutsches Elektronen-Synchotron (DESY), a national nuclear research center in Hamburg, Germany where he spent 5 years, and then recently got his present faculty position at Istanbul Technical University (ITU) in Istanbul, Turkey. Recently, Altan Çakır won guest faculty/scientist award from Fermi National Accelerator Laboratory (Fermilab), Illionois, USA. Currently, he is a deputy of ITU-CMS group at CERN and leading a data analysis group searching for new physics at the CMS experiment. His group's expertise is focused around machine learning techniques in data analysis and detector development. However, their research is very much interdisciplinary, with expertise in the group ranging from particle physics, detector development and data analysis synthesis to economy and industrial applications.

Altan Çakır involved a large number of high profile research projects at CERN and DESY last eleven years. He enjoys being able to integrate his research and teaching key concepts of particle physics and data analysis. It's rewarding to be part of the development of the next generation of physicist, and help his students move on to careers all over the world, in academia, industry and government.

Education Information

Doctorate, Universitad Karlsruhe, Fizik Fakültesi, Deneysel Parçacık Fiziği, Germany 2006 - 2010 Postgraduate, Izmir Institute Of Technology, Institute Of Engineering And Natural Sciences, Fizik (Yl), Turkey 2003 - 2006 Postgraduate, Ege University, Fen Bilimleri Enstitüsü, Fen Ve Matematik Alanlar Eğitimi (Yl), Turkey 2002 - 2004 Undergraduate, Ege University, Faculty Of Science, Fizik Bölümü, Turkey 1997 - 2002

Foreign Languages

German, B2 Upper Intermediate

Dissertations

Doctorate, Standard Model Background Studies for SUSY Searches with the CMS Detector at the LHC, Universitad Karlsruhe, Institut Fuer Kernphysik, 2010

Postgraduate, Flavor violation in supersymmetry, İzmir Yüksek Teknoloji Enstitüsü, Mühendislik Ve Fen Bilimleri Enstitüsü, Fizik (Yl), 2006

Research Areas

Basic Sciences, Physics, Interdisciplinary Physics and Related Science and Technology Areas, Basic Particles and Areas

Academic Titles / Tasks

Associate Professor, Istanbul Technical University, Fen-Edebiyat Fakültesi, Fizik Mühendisliği Bölümü, 2015 - Continues Associate Professor, --Seçiniz--, Cern , Cms Experiment, 2005 - Continues

Associate Professor, --Seçiniz--, Fermi National Accelerator Laboratory (Fermilab), Lpc-Cms, 2017 - 2017

Medical Doctor, Universitad Karlsruhe, Fizik Fakültesi, Deneysel Parçacık Fiziği, 2010 - 2010

Other, Boston University, Faculty Of Science, Physics, 2006 - 2006

Other, The Weizmann Institute of Science, Cern Groups, Physics Department, 2006 - 2006

Research Assistant PhD, Izmir Institute Of Technology, Faculty Of Science, Department Of Physics (English), 2004 - 2006

Other, Universita Degli di Lecce, Physics, High Energy And Particle Physics, 2005 - 2005

Other, --Seçiniz--, International Centre For Theoretical Physics, Ictp, 2004 - 2004

Academic and Administrative Experience

Courses

Physics I SUNY, Undergraduate, 2016 - 2017

Special Topics in HEP I, Doctorate, 2016 - 2017

Event Generators and Searches of Supersymmetry, Doctorate, 2014 - 2015

Event Generators and Search for Supersymmetry at the CMS Experiment, Doctorate, 2014 - 2015, 2012 - 2013

Introduction to Supersymmetry Searches at the LHC, Postgraduate, 2012 - 2013

Articles Published in Other Journals

I. Enabling real time big data solutions for manufacturing at scale Çakır M. A., Akın Ö., Deniz H. F., Yılmaz A. Journal of Big Data, vol.9, no.1, 2022 (Scopus)

Supported Projects

Çakır M. A., Project Supported by Higher Education Institutions, CMS Veri Çözümleme Sempozyumu ve İleri Araştırma Teknikleri, 2016 - 2018

Metrics

Publication: 33 Citation (WoS): 17 Citation (Scopus): 24 H-Index (WoS): 2 H-Index (Scopus): 3

Non Academic Experience

Parton Büyük Veri Analitiği ve Danışmanlık A.Ş.
Other, Cern, Cms
State Agency, Cern, Cms
European Organization for Nuclear Research (CERN)
Fermi National Accelerator Laboratory
Karlsruhe Institute of Technology
State Agency, Desy, Susy
Deutsches Elektronen Synchrotron (DESY)
Karlsruhe Institute of Technology