

Dr. Altan ÇAKIR

Ph.D (Research) High Energy and Particle Physics (2010)
M.Sc (Research) High Energy and Particle Physics (2006)
M.Sc Natural Sciences and Education (2004)
B.Sc. Natural Sciences - Theoretical Physics (2002)

(2011-) Post-Doctoral Research Associate & Scientist

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PROFILE Ambitious and driven professional with expert analytical knowledge of the scientific and educational sectors coupled with academic skills. Strong interpersonal skills, a friendly and approachable disposition together with honed psychological and interpersonal skills leads to a position where rapid reading of situations and subsequent reaction is required. A self-starter, can work efficiently on own initiative or can integrate easily into a team environment.

CAREER HISTORY **Post-Doctoral Research Associate & Scientist** Aug. 2010 to Present
Deutsches-Electronen Synchrotron (DESY), Hamburg, Germany

DESY is a leading natural science area based in Hamburg. I entered the organisation as a graduate scientist in the CMS-SUSY scientific team. During my time at DESY I consolidated the scientific research and teaching as well as successfully building a research group on my own initiative. I undertook significant scientific researches in the high energy and particle physics and a number of detailed studies were published and followed up with a number of scientific contributions.

Duties Included:

- ◆ Theoretical Motivation of Scientific Problems
- ◆ Organization of the Analysis Group
- ◆ Supervision to the Graduate Students
- ◆ Coordination with CERN Research Groups
- ◆ Contributions to the Scientific Working Groups & Conferences
- ◆ Scientific Publications

Researcher (Ph.D) Sept. 2006 - Aug 2010
Karlsruhe Institute of Technology (KIT), Karlsruhe, Germany
Baden-Wuerttemberg Ph.D Fellow

In this position and education I was responsible for a scientific research based on Supersymmetry Searches in the CMS Detector at the LHC Experiment. A number of high profile scientific and research professionals apply on an annual basis for theoretical and experimental high energy and particle physics under the KIT, Institute for Nuclear Physics research grants program. The research grant proposals were interpreted and the relevant professionals in the field Supersymmetry Searches in the CERN Nuclear Research Laboratory and finalized with a number of scientific publications.

Duties Included:

- ◆ Research and Development for scientific tools
- ◆ Technical responsibilities for the institutional computing infra structure
- ◆ Sherpa-MC-Contact person in the CMS Collaboration
- ◆ Scientific Publications

Research Assistant (M.Sc) Dec. 2004 to Aug. 2006
Department of Physics
Izmir Institute of Technology (Iztech), Izmir, Turkey

This project involved the investigation of the Flavor Violation in Supersymmetry. The project involved significant research on the high energy and theoretical particle physics and concluding with two respectful publications and a scientific book. Valuable skills gained from this work included excellent organisational and communication skills, lecturing and presentation skills and technical data interpretation and report writing.

ICTP Summer Studentship Jun 2004 - Aug 2004
Astrophysics and Gravity Summer School, Full Studentship, Unesco
International Physics For Theoretical Physicist, Trieste, Italy

EDUCATION	Philosophy of Doctorate in Science (Research) (Ph.D) Major: Experimental Searches for Supersymmetry with the CMS Minor: Computing tools and algorithms for the research (CMS) Karlsruhe Institute of Technology (KIT), Germany European Organization of Nuclear Research(CERN) Swizerland	Sep 2006 to July 2010
	Master of Science (Research) (M.Sc) Major: Phenomenological Searches for Supersymmetry Minor: Experimental Particle Physics / the CMS Experiment Department of Physics, Izmir Institute of Techology, Turkey	Sep 2003 to July 2006
	Master of Science in Physics Education (M.Sc) Major: Physics Education Graduate School of Natural and Applied Sciences, Ege University, Turkey	Sep 2002 to Feb 2004
	Bachelor of Science Major: Theoretical Physics Department of Physics, Ege University, Turkey	Sep 1997 to Jun 2002

ACADEMIC ACTIVITIES

Selected Publications	<ul style="list-style-type: none"> - Phenomenological issues in Supersymmetry with non-holomorphic soft breaking, M. A. Cakir and S. Mutlu, L. Solmaz Physical Review D 71, 115005 (2005). - Effects of Supersymmetric Threshold Corrections on High-Scale Flavor Textures. M. A. Cakir . Aug 2006. 25pp. M.Sc. Thesis, PMC Phys.A2:2, 2008. - More than 100 publications in the CMS Collaboration between 2006 – present, for details can be found in www.slac.com/spires/
Selected Talks	<ul style="list-style-type: none"> - “Searches for Supersymmetry with the CMS Experiment”, 15th Lomonosov Conference on Elementary Particle Physics , Moscow State University, August 2011, Moscow, Russia. - “SUSY Searches with CMS”, LHC Physics Discussion, April 2011, DESY, Hamburg, Germany - “Theoretical uncertainties for SUSY searches in CMS and Sherpa background studies for SUSY searches in CMS at 10 TeV” , GK-Workshop, September 2009, Freundanstadt , Germany - “Standard Model Background comparison and systematic uncertainties for SUSY searches” , FSP-CMS Meeting, August 2008 , Aachen, Germany - “Effects of Supersymmetric Threshold Corrections on High-Scale Flavor Textures” , Middle East Technical University, April 2006, Ankara, Turkey. -“Phenomenological issues in supersymmetry with non-holomorphic soft breaking ”, Seminar , Physics, Department, Izmir Institute of Technology, Turkey, June 2005, Izmir, Turkey
Conferences	<ul style="list-style-type: none"> - 15th Lomonosov Conference on Elementary Particle Physics, August 2011, Moscow, Russia - SUSY07, Karlsruhe Institute of Technology (KIT), April 2007, Karlsruhe, Germany.
Selected Workshops	<ul style="list-style-type: none"> - Physics at TeV Colliders, Les-Houches WG I, June 2011, Les Houches, France - GridKA, Forschung-Zentrum Karlsruhe, (FZK), September-2008, Karlsruhe-Germany - TeV Scale Particle Physics, DESY, April-2007, Hamburg-Germany - Particle Physics in LHC and Beyond the Standard Model, University Paris VII, December 2006, Paris, France - International Committee for Future Accelerators (ICFA) - Instrumentation School on Particle Physics and Detector Applications, September 2005, ITU, Istanbul, Turkey

COMPUTER SKILLS

Physics Simulations: Madgraph, Alpgen, Pythia, Sherpa, MC@NLO, MCFM, SOFTSUSY, ISAJET with Standalone and CMSSW interfaces
Data Analysis: CMSSW, PAT, Rivet, Root
Programming Software: C++, Python, Crab, Mathematica.
Package Programs: Scientific Linux CERN (all versions), Unix, Ubuntu, Red-Hat, Microsoft Windows/Office.
Administration: Fileservers administration in KIT/IEKP. Raid Controller 5/6 and Areca Tool Administration

**PROFESSIONAL
MEMBERSHIPS**

Compact Muon Selenoid, Collaboration European Organization For Nuclear Research (CERN), CMS, April 2004 - present, Geneva, Switzerland
CERN Courier, European Organization For Nuclear Research, Geneva, CH
German Physics Society (DPG), September 2006 - present.

**INTERESTS &
ACTIVITIES**

I have a keen interest and broad spectrum of activities in Music. I also interest in history of Europe and Middle -East. I enjoy popular science and nature and keep up to date with recent advances and progress in these areas. I like jogging and playing table tennis.

REFERENCES

Prof. Dr. Wim de Boer (Ph.D Advisor)
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Prof. Dr. Durmus Ali DEMIR (M.Sc Advisor)
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Young Investigator Group Leader, DESY, Hamburg, Notkestr. 85, 22607, Hamburg, Germany
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