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Introduction

Young doctor of physics with 4 years experience in experimental particle physics, with focus on the following areas: microMEGAs x-ray detectors(installation, hardware maintenance, data acquisition system, performance tests, upgrades and analysis), vacuum systems, data acquisition and control systems. During my doctoral studies, I had a lot of hands on experience, and have developed software/hardware solutions for problems and tasks that are encountered in particle physics experiments. I'm proficient in computing, my skills being focused on but not limited to C++ and python. Being very interested in sharing knowledge, and possessing advanced communication skills, I was appointed as CAST Experiment contact person. I highly value collaborative spirit, and am skilled in working in collaborative environment efficiently.

Education and Qualifications

- 2009 - 2013 , *PhD. in Physics, Bogazici University & CERN Axion Solar Telescope*
Thesis Title: Search for Axions with Micromegas Detectors in the CERN CAST Experiment
Supervisor: Prof. Metin Arik
- 2005 - 2008, *M.S. in Physics, Bogazici University*
Thesis Title: Unitary Matrix Hopf Algebras and Theta-Deformed Fermion Algebra
Supervisor: Prof. Metin Arik
- 2000 - 2005 , *B.S. in Physics, Koc University*

Professional Experience

- 2009 - 2013 , *CERN - CAST Doctoral Student*
As part of doctoral studies, I worked in the CAST experiment, spending most of my time in CERN. With main responsibility being micromegas detectors, I have contributed to the hardware, software, and physics case of CAST. I took part in the organizational side, conducting run coordination, shift coordination duties, and I am contact person of CAST since 2011.
- 2009 - 2012, *Bogazici University, Teaching Assistant, Part-time*
Taught laboratory courses on introductory physics and electronics.
- 2003 - 2005 , *Koc University, Laboratory Research Assistant*
Assisted laboratory experiments in the electronics laboratory.
- 2003 , *Koc University, Laboratory Assistant*
Assisted laboratory courses on introductory physics.

Selected Publications

Probing the eV-Mass Range for Solar Axions with CAST

The CAST Collaboration, IEEE Nucl.Sci.Symp.Conf.Rec, 342-346, 2010.

Search for Sub-eV Mass Solar Axions by the CERN Axion Solar Telescope with ^3He Buffer Gas

The CAST Collaboration, Phys. Rev. Lett., 107, 261302, 2011.

The New Micromegas X-ray Detectors in CAST

Tomás, A., et al., X-Ray Spectrometry, 40, 240-246, 2011.

New Micromegas for Axion Searches in CAST

Irastorza, I., et al., J. Phys.: Conf. Ser., 309, 012001, 2011.

Performance of Micromegas Detectors in the CAST Experiment

Yildiz, C., et al., J. Phys.: Conf. Ser., 347, 012029, 2012.

The Discrimination Capabilities of Micromegas Detectors at Low Energy

Iguaz, F., et al., Proceedings of TIPP2011, 37, 1079-1086, 2012.

CAST Microbulk Micromegas in the Canfranc Underground Laboratory

Tomas, A., et al., Proceedings of TIPP2011, 37, 478-482, 2012.

Future Axion Searches with the International Axion Observatory (IAXO)

Irastorza, I., et al., J. Phys.: Conf. Ser., 460, 012002, 2013.

Low-background X-ray Detection with Micromegas for Axion Research

Garcia, J., et al., J. Phys.: Conf. Ser., 460, 012003, 2013.

Talks/Posters

X-Ray Detectors of the CAST Experiment

13th Topical Seminar on Innovative Particle and Radiation Detectors, Siena, 2013

Performance of micromegas detectors in the CAST Experiment

2nd International Conference on Particle Physics, Istanbul, 2011

Technical Skills

Programming: C++, Python, ROOT, php, html, L^AT_EX, Bash, Labview

Data Acquisition: NIM, VME systems, National Instruments cards

Vacuum Systems: General vacuum knowledge, turbo Pumps, diaphragm pumps

Operating Systems: Linux, Windows, Android

Office Software : MS. Office, Libreoffice, Openoffice

Trainings and Courses

- 2013 June, tCSC - Thematic CERN School of Computing on High Performance Computing, Split
2012 August, Euroscipy - European Conference for Scientists Using Python - Advanced Tutorial, Brussels
2011 January , ISTAPP - International School of Theory and Analysis in Particle Physics, Istanbul
2010 July , Euroscipy - European Conference for Scientists Using Python - Basic Tutorial, Paris
2010 January , ISOTDAQ - International School on Trigger and Data Acquisition, Ankara
2009 September, LabVIEW Basics I-II Course, CERN, Geneva

Language Skills

Turkish, *Native*

English, *Fluent*

French, *Intermediate*

Spanish, *Intermediate*

Awards and Honors

- 2012, Berkol Doğan Award - Bogazici University Physics Department
2005-2007, TUBITAK Domestic Scholarship for Masters
2005, Top Ranking Student Award - Koc University Physics Department
2000-2005, Vehbi Koc Scholarship - Koc University

Personal

Born on March 23, 1983.

Citizen of Republic of Turkey.

Other

- 2011 - ... CAST Experiment, CERN, Contactperson
2011 - ... CERN, Official CERN Guide

References

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