

Athanasios Margiolakis

athanasios@pm.me (+30)6906692824

EDUCATION

PHD. PHYSICS

Oct 2013 - Today



University of Crete, Greece & Okinawa Institute of Science and Technology, Japan

Study the Ultrafast Dynamics of GaAs under laser excitation, setup for Second/Third Harmonic generation, measure on THz-TDS systems and experiment on Laser ablation applications.



MSC. APPLIED PHYSICS

Oct 2009 - Nov 2011



University of Crete, Greece & IMT Bucharest, Romania

Applied Physics, Microelectronics/Semiconductor Physics, Optoelectronic and Laser physics.



BSC. PHYSICS

Oct 2001 - Aug 2007

University of Crete, Greece

General physics, Microelectronics/Semiconductor Physics, Digital and Analog Electronics.

WORK EXPERIENCE

OIST, *PhD student*

Oct 2013 - Sep 2015



Working on THz-TDS, Second Harmonic generation, Laser Ablation for slicing fragile pieces of art, Laser ablation on GaAs antenna for enhanced THz emission, XRD data analysis of historic Okinawan pottery, developing semiconductor devices/antennas in a clean-room, SEM imaging and setting up a femtosecond spectroscopy lab from the ground up.



CERN, *Technical student*

Jan 2012 - Feb 2013

Working in the BI-QP group, running experiments on the "Beam Position Monitoring" temperature stabilization system for LHC updates of 2013 and optimizing the temperature stability of the current "BPM" cards



IMT BUCHAREST, Trainee

Jun 2011 - Jul 2011

Microelectronics research for Master thesis, investigation of Surface Acoustic Wave resonators from GaN on Si at frequencies above 5GHz for uses in future telecommunication applications. Designing and simulating using Finite Element Method analysis.



FORTH IESL, Student

Oct 2006 - Mar 2007

Science research for Bachelors thesis, numerical and experimental investigation of SiN Microcantilevers - "Discrete Breathers" in non-linear physics. , supervisors Prof. G.Tsironis and Prof. P.Tzanetakis



UNIVERSITY OF CRETE, Summer Job

Jul - Aug 2003

Data Analysis on an experiment of Earths Higher Atmospheric Layers - University of Crete, employer Dr. C.Haldoupis



HERAKLION WIRELESS METROPOLITAN NETWORK, Volunteer

2002 - 2005

Design/Build open/free city wireless network. Experiment with new non-commercial wireless technologies like the Optical link RONJA to avoid saturated microwave bands, that require circuit design and assembly-soldering.

CONFERENCES

Optical Terahertz Science - Technology Conference	8-15 Mar 2015	USA
APS Meeting San Antonio	2-6 Mar 2015	USA
Frontier of Terahertz Science international symposium	4-6 Aug 2014	Japan
Ultrafast Phenomena at the Nanoscale workshop	11-13 Jul 2014	Japan
NQMP: The OIST International Workshop	14 May 2014	Japan
Lighting Up New Frontiers - Joint ISSP-OIST Symposium	10-11 Mar 2014	Japan
OIST Beam Physics workshop	28-29 Nov 2013	Japan
8th DITANET Topical Workshop on Beam Position Monitors	16-18 Jan 2012	Switzerland
ICFA Beam Dynamics mini workshop on Low Emmitance Rings	3-5 Oct 2011	Greece

TEACHING

Undergraduate" Physics Labs II – Optics"

Undergraduate "Advanced Physics Labs – Nuclear Physics"

Teaching and co-organizing a Photography class of 100+ active members FOPK

Assistant 2009-2011

Zeron Member 2009-2011

SKILLS & INTERESTS

Greek Native Speaker
English Proficiency
French Beginner
Japanese Beginner

Matlab Simulation, Analysis, Visualization. Finite element method simulations. Comsol Used for quick solving simple physics calculations **Fortran** Automation of gathering data in laser lab LabView **Origin Pro** Plot and analysis of scientific data **HTML** Basic editing for web-pages Phython Beginner in Machine Learning PLEX Latex Writing papers and PhD thesis Office suite Word, Excel, Powerpoint Photoshop, Premiere, Inkscape, Blender Various

Electronics Assembly, solder, repair boards and hobby DIY projects including Arduino projects

OTHER



HELLENIC ARMY, Mandatory Military Service

Greek Armed Special Forces -Commando Paratrooper Medic.

2007 - 2008



CRYSTAL SERVICES CO., Employee

2008 - 2009

E-commerce manager and IT administrator for a company re-seller for South Greece on Wellan products.