

Curriculum Vitae – Professor Theo Alexopoulos

Main Field of Study	Experimental High Energy Physics
Personal Information	Date of Birth: 01 May 1960 Place of Birth: Egaleo, Athens, Greece Family Status: Married Nationality: Greek Military Service: Armored Greek Army Forces
Education	Ph.D. in Physics, University of Wisconsin, Madison, 05.91 MSc in Physics, University of Wisconsin, Madison, 05.87 Graduate Studies at National Nuclear Center “Demokritos”, 12.84 B.Sc. in Physics, National & Capodistrian University of Athens, 05.83
Academic Positions	Professor of Physics, National Technical University of Athens, 04.09 to present Associate Professor of Physics, NTU Athens, 08.2000 to 03.2009 Collaborating Faculty Member of the Hellenic Open University, 10.01 to present Corresponding Associate at CERN at various time periods Assistant Scientist, University of Wisconsin, Madison, 08.94 to 07.00 Research Associate, University of Wisconsin, Madison, 07.91 to 07.94 Graduate Research Assistant, University of Wisconsin, Madison, 01.85 to 05.91 Fellow at National Center for Scientific Research “Demokritos”, 10.82 to 12.84
Teaching Experience	Undergraduate Courses: Designed and taught/teaches various undergraduate courses <ul style="list-style-type: none"> • Mechanics • Introduction to Particle Physics • Electromagnetism • Quantum Mechanics • Signal Analysis • Pattern Recognition & Neural Networks • Electronics & Laboratory Laboratory Courses: <ul style="list-style-type: none"> • Electronics lab • Physics II (Electromagnetism) laboratory for Engineers • Computational Physics, PC-lab • Physics I (Mechanics) for engineers • Physics III (Wave mechanics) for Physics science students Graduate Courses: <ul style="list-style-type: none"> • Instrumentation • Radiation Technology
Awards & Honors	Greek delegate at the ECFA (European Committee for Future Accelerators). Greek representative at the ESFRI for the Physics & Engineering section Corresponding Associate at CERN of a 14 month period in total. Research Assistant at the University of Wisconsin, Madison. Fellowship University of Wisconsin, Madison, 07.91 to 07.94. Fellowship of the Greek National Fellowship Foundation, 79 to 81
Student Supervision	Diploma Theses: 51, Masters Theses: 17, Ph.D. Theses: 5
Departmental Activities	Head of the Physics Department Graduate Student Committee. Head of the qualifying exam committee of the Physics Department. Member of the peer reviewing committee for scientific proposal at the Cyprus Research Center. Member of various University committees.
Research Grants	Involved in five research grants as a Principle Investigator
Books	Authored or co-authored 12 university textbooks in Greek and English language <ul style="list-style-type: none"> • Introduction to Signal Analysis • Signal & Systems (Problems) • Wave Mechanics, Quantum Mechanics, Statistical Mechanics, Examples & Problems • Electricity & Magnetism, translation of the University of California Berkeley physics series textbook, by E.M. Purcell • Statistical Pattern Recognition • Introduction to Mechanics (Problems) • Introduction to Electromagnetics (Problems) • Introduction to Elementary Particles • Introduction to Quantum mechanics with a Short Introduction to Analytical Mechanics • Mathematics for Physical Sciences • Problems in Mechanics at Graduate Level • Introduction to Electronics
Seminars & Talks	Total of 42 talks at various conferences and University colloquium/seminar programs. Total of 14 outreach talks and seminars. More information on the latest invited talks is included in next pages. Member of 10 international conferences/symposia organizing committees.

Major Responsibilities & Coordination	<p>MAMMA R&D Collaboration (2008 to present):</p> <ul style="list-style-type: none"> • Co-responsible of the NTU Athens team • Co-responsible of the MAMMA test beam at H6/CERN • Co-responsible of the MAMMA test beam at “Demokritos” <p>ATLAS/CERN Experiment (2001 to present):</p> <ul style="list-style-type: none"> • Co-responsible of the DCS MDT test beam at H8 • NSW & MUON System DCS coordinator • Co-responsible of the HV/LV DCS MDT & CSC of ATLAS Experiment • Co-responsible of the Greek teams for the micromegas upgrade of the small wheel of ATLAS Experiment • Coordinator of the Greek consortium for integration and installation of the BIS (Barrel Inner Small)-MDT chambers of the ATLAS experiment • Co-Coordinator of the NTU Athens laboratory site of the BIS-MDT Chambers. • Co-responsible of the NTU Athens GRID PC farm <p>Minos/FNAL Experiment (1999-2000, eight month period):</p> <ul style="list-style-type: none"> • Level-3 (coordinator) manager of the Detector Control System (DCS) <p>KTeV/FNAL Experiment (1994-2000):</p> <ul style="list-style-type: none"> • Coordinator of the DCS system • Coordinator of the electronics system of DCS • Design & built the L1 hit-OR of the KTeV experiment wire chambers • Co-responsible of the hyperon physics analysis group <p>E771/FNAL fixed target Experiment (1992-1994)</p> <ul style="list-style-type: none"> • Built the luminosity telescope of the experiment • Design and built interface cards for the pad chambers • Study the two body decays (K^0, Λ) to associate them with J/Ψ's to study B_s <p>Technical Activities at the HEP laboratory of University of Wisconsin, Madison</p> <ul style="list-style-type: none"> • Coordinator of the Unix cluster system • Developed a micro-gap gas chamber utilizing the Wisconsin Center for Applied Microelectronics • Run beam test to study Cherenkov counter at Brookhaven National Laboratory <p>E735/FNAL Experiment (thesis experiment, 1986-1991):</p> <ul style="list-style-type: none"> • Built various types of wire drift chambers (magnet and vertex chambers) • Wrote part of the experiment tracking program • Wrote a homemade Monte Carlo program that used at various analysis • Analyzed data introducing the neural network techniques for resonance searches <p>Research Experience before graduate school</p> <ul style="list-style-type: none"> • Study the ALEPH TPC prototype at CERN as a student • Use numerical Monte Carlo techniques to study the magnetic field of a magnet • Study heavy-ion interactions as part of my senior thesis
Publications	390 published journal papers 101 internal reports 43 proceeding papers
Various Activities	<ul style="list-style-type: none"> • Member of the School of Applied Sciences assembly 2002 to present • President of the Hellenic Society for the Study of High Energy Physics, 2013-2014 • President of the Hellenic Society for the Study of High Energy 2013-2014 • Member of the board of directors of the Hellenic Society for the Study of High Energy Physics, 2004–2005, 2011-2013 • Member of several hiring committees of various Greek Universities

Most Cited Papers

1. “Observation of a New Particle in the Search for the Standard Model Higgs Boson with the ATLAS Detector at the LHC”, G. Aad, *et.al.*, Phys. Lett. B716 (2012) 1-29
2. “The ATLAS Simulation Infrastructure”, G. Aad, *et. al.* Eur. Phys. J C70 (2010) 823-874
3. “Expected Performance of the ATLAS Experiment – Detector, Trigger and Physics”, G. Aad, *et. al.*, arXiv:0901.0512
4. “The ATLAS Experiment at the CERN Large Hadron Collider”, G. Aad, *et. al.* JINST 3(2008) S08003
5. “Observation of Muon Neutrino Disappearance with the MINOS Detectors and the NuMI Neutrino Beam, D.G. Michael, *et al.*, Phys. Rev. Lett. 97 (2006) 191801
6. “Observation of Direct CP Violation in $K(S,L) \rightarrow \pi \pi$ Decays”, A. Alavi-Harati, *et. al.*, Phys. Rev. Lett 83 (1999) 22-27.