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Evangelos N. Gazis

Professor of Particle Physics
National Technical University of Athens (NTUA)
Team Leader of the HEP-NTUA group (2000-Today)

SYNOPSIS

Research Experience focus on:

PARTICLE PHYSICS

- ❖ *B-physics analysis of the performing measurements of Standard Model processes with $X_b \rightarrow J/\Psi + J/\Psi \rightarrow \mu^+ \mu^- \mu^+ \mu^-$ and Higgs boson at the LHC*
- ❖ *The R&D for searching for new physics and the participation into the MicroMegas detector for New Small Wheel for the ATLAS muon spectrometer upgrade during the LHC phase-II period*
- ❖ *AIDA Project, task for the MicroMegas R&D and KTT to the Greek Industry*
- ❖ *Coordination of the Greek ATLAS group for the 128 MDT-BIS chambers design, construction, certification, installation and Commissioning at the ATLAS Muon Spectrometer*
- ❖ *Coordination for the DCS R&D and implementation to the MDT chambers at the ATLAS Muon Spectrometer*
- ❖ *Participation to the following Collaborations at CERN:*
 - CLIC project, 2008-today, Neutron radiation studies of the support materials, beam instrumentation, RF tests, MicroMegas detector R&D
 - ATLAS, at LHC, 1990- today, Muon Spectrometer, MDT-BIS R&D and construction, DCS R&D and construction
 - DELPHI, at LEP, 1986-2000, RICH detector R&D and construction
 - NA14 and NA14', at SPS, 1980-1988, Cerenkov detector R&D and construction

ACCELERATOR TECHNOLOGY

- ❖ *The beam instrumentation and DCS development for the CLIC project*
- ❖ *RF tests for the accelerating parts of CLIC*
- ❖ *MicroMegas detector to monitor the beam dump of the CLIC*

APPLIED RESEARCH in NUCLEAR & PARTICLE PHYSICS

- ❖ *The ATLAS/EDUSAFE, EU ITN-network for the background radiation monitoring in the frame of augmented reality technology*
- ❖ *HEPTech Network for the KTT to industry*
- ❖ *Proton therapy facility, coordination activity for Greece*
- ❖ *Neutron test-beam measurements on detectors and materials at the Demokritos Tandem Laboratory:*

[Drift Properties of the ATLAS MDT Chambers](#)

Published in: Nuclear Inst. and Methods in Physics Research, A (2006)

[Implementation of the Legendre Transform for the Muon Track Segment Reconstruction in the ATLAS MDT Chambers](#)

Published in: 2007 IEEE Nuclear Science Symposium Conference Record

[Simulation Study of the ATLAS Muon Drift Tube Chambers Performance in Presence of Magnetic Field](#)

Published in: 2006 IEEE Nuclear Science Symposium Conference Record
[Determination of the ATLAS MDT Chambers Response to 0.5–10 MeV Neutrons and Development of a Simulation Model](#)

Published in: Nuclear Inst. and Methods in Physics Research, A, (2007)

❖ *Neutron Irradiation Facility in Athens*

http://www.heptech.org/Phocea/Vie_des_labos/Ast/ast_sstechnique.php?id_ast=121

EDUCATION

- 1980-1976: PhD, University of Athens, Physics Department, part of the PhD thesis was performed at NRC "Demokritos", Greece and the University of Paris-Sud XI (Orsay, France)
- 1978-1975: Graduate Studies at NRC "Demokritos"
- 1973-1969: Physics BSc, University of Athens, Physics Department

ACADEMIC POSITIONS

- Today-2010: Chair of the NTUA Senate Committee for International Affairs
- 2010-2009: Guest Professor by CERN DG, PH-Department, CERN
- Today-2010: Visiting-Professor to Technology Educational Institute of East Macedonia-Thrace
- 2008-2007: Visiting Professor, Physics Department, University of Lund, Sweden
- 2005-1995: Visiting Researcher to MPI-Munich, LMU, Univ. Pavia, Univ. Roma I, Univ. Roma III, CEA Saclay, Univ. Paris Sud XI
- Today-1987: Professor of Particle Physics, School of Applied Mathematical & Physical Sciences, Physics Department, NTU-Athens

RESEARCH-ADMINISTRATION POSITIONS

- Today-2006: National Contact Physicist (NCP) for the ATLAS Greek teams, CLIC, CAST, RD-51 Collaborations
- Today-2006: Coordinator of the Greek technical teams for the LHC integration construction (2006-2008) and LHC consolidation LS1 (2012-2015)
- Today-2008: Delegate of Greece at IUPAP-C11/C12
- Today-2007: Coordinator of the CERN-Greek Working Group, monitoring the progress of the Greek Students, Fellows, Staff, Greek Industries, Greek Activities with KTT
- Today-2005: Financial responsible for the Greek participation to the CERN Experiments
- 2012-2005: Delegate of Greece to the CERN Council
- 2012: Coordinator of the European Network HEPTech
- Today-2005: ILO/NTTO-Delegate of Greece to CERN
- 2010-2005: General Secretary of the Greek Committee for the Cooperation with CERN
- 2010-2007: Member of the CERN-Council WG:
 - ✓ *The Governing of CERN, 2007-2008*
 - ✓ *The Geographical and Scientific Enlargement of the Organization, 2009-2010*
 - ✓ *The Fact-Finding Task Force for the candidate member states (Cyprus, Israel, Serbia, Slovenia, Turkey), 2010*
- Today-2012: Coordinator of the Greek teams to the FP7 program: ITN-EDUSAFE for the augmented reality (AR) control system for the background radioactivity monitoring, measurement

- Today-2010: Coordinator for the Greek teams to the FP7 program: AIDA for the future detector development
- Today-2010: Convener of the CONTROLS initiative for the European Network HEPTech
- 2006: Founding member of the European Network HEPTech
- Today-2003: Member of the IEEE-NSS-MIC_CIP Committee
- Today-2003: Referee of the IEEE-NSS-MIC Conference & IEEE Nucl. Transactions
- Today-1998: Member of the Organizing Committee of the 4-Seas Conference, for Particle Physics, Astro-Physics and Medical Physics
- Today-1981: of the Organizing Committee of the Particle Physics Summer School at Corfu

RESEARCH & EDUCATIONAL SUPERVISION

- Co-author to more than many (675) international scientific papers in particle-, nuclear- and astro-physics with more than 32000 citations
(http://inspirehep.net/search?ln=en&p=f+a+gazis&of=hb&action_search=Search)
- Invited speaker to about 50 international conferences, seminars, universities and research centers
- Author to monographs for the ATLAS Muon Spectrometer TDR (2000) and 11 university lecture notebooks for the NTUA students
- Teaching to under-/post -graduate courses at NTUA (1980-today), Lund Univ. (2007-today), CERN Summer Students supervision (Today-1993)
- 14 PhD's supervision at NTUA
- External Examiner for PhD theses examination at Universities: Athens, Thessaloniki, Ioannina, LMU (Germany), Taragona (Spain) and Lund (Sweden)

ADDITIONAL RESEARCH ACTIVITIES WITH APPLICATIONS & OUTREACH

- ❖ *Coordination of the scientific group for the development of the proton therapy in Greece and the relative transfer technology from CERN to Greek industry*
- ❖ *Participation to the FP7 program CLIMB for the RF-linac for medical applications development.*
- ❖ *Coordination of the High School Teachers training at CERN, from all the regions of Greece.*
- ❖ *Participation to the HEP outreach program at Greece: "Masterclasses" and seminars for High School students and teachers, university students and the public.*

PUBLICATIONS

1. Publication

list:http://inspirehep.net/search?ln=en&p=f+a+gazis&of=hb&action_search=Search

2. Citations list:

http://inspirehep.net/search?ln=en&ln=en&p=f+a+gazis&of=hcs&action_search=Search&sf=&so=d&rm=&rg=25&sc=0

Most Important Papers:

1. Observation of a new particle in the search for the Standard Model Higgs boson with the ATLAS detector at the LHC

ATLAS Collaboration (Georges Aad (Freiburg U.) *et al.*). Jul 2012. 24 pp. Published in **Phys. Lett. B716 (2012) 1-29** e-Print: [arXiv:1207.7214 \[hep-ex\]](#) CERN-PH-EP-2012-218, [Cited by 1596 records](#)

2. The ATLAS Simulation Infrastructure

ATLAS Collaboration (G. Aad (Freiburg U.) *et al.*). 2010. 53 pp. Published in **Eur. Phys. J. C70 (2010) 823-874** e-Print: [arXiv:1005.4568 \[physics.ins-det\]](#) [Cited by 604 records](#)

3. Expected Performance of the ATLAS Experiment - Detector, Trigger and Physics

ATLAS Collaboration (G. Aad *et al.*). Jan 2009. 1852 pp. SLAC-R-980, CERN-OPEN-2008-020 e-Print: [arXiv:0901.0512 \[hep-ex\]](#) [Cited by 1342 records](#)

4. The ATLAS Experiment at the CERN Large Hadron Collider

ATLAS Collaboration (G. Aad (Marseille, CPPM) *et al.*). 2008. 437 pp. Published in **JINST 3 (2008) S08003** [Cited by 1975 records](#)

REFEREES

1. Steinar Stapnes, CLIC Study Project Coordinator
2. George Mikenberg, Weizmann Institute
3. Dave Charlton, ATLAS Spokesman
4. Fabiola Gianotti, ATLAS ex-Spokesman
5. Peter Jenni, ATLAS ex-Spokesman
6. Sergio Bertolucci, CERN Director of Research & Computing
7. Rolf Heuer, CERN DG
8. Dimitri Nanopoulos, Greek Delegate to the CERN Council

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