

# CV: IOANNIS NOMIDIS

October 2013

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## Personal Information

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## Current position

**2/2009–now:** Research Assistant, Aristotle Univ. of Thessaloniki, ATLAS group.

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## Activities

**2008–now:** Research in particle physics, as a member of the ATLAS experiment at the Large Hadron Collider (LHC) at CERN.

- **2009–2013:** Research towards Ph.D. within the ATLAS B-physics and Standard Model Work-Groups.
- **2008–2011:** Contribution in the development of the Data Quality Monitoring software for the ATLAS Muon Spectrometer.

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## Education

**2013:** Ph.D. in particle physics, defended on 20 September 2013. Title: “Study of the b-quark properties with the first ATLAS data”, advisor: Prof. Chara Petridou

**2008:** M.Sc. in Computational Physics, Physics Department of Aristotle Univ. of Thessaloniki, score 9.75 / 10 (Excellent).

**2006:** Degree in Physics (Ptychion), Physics Department of Aristotle Univ. of Thessaloniki, score 7.6 / 10 (Very Good).

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## Participation in advanced schools of physics

**8/2013:** CERN-Fermilab Summer School “HCP 2013”, CERN

**2/2013:** International School of Trigger and Data Acquisition “ISOTDAQ 2013”, Aristotle Univ. of Thessaloniki

**2/2011:** International School of Theory and Analysis in Particle Physics “ISTAPP 2011”, Istanbul, Turkey

**8/2009:** 65th Scottish Universities Summer School on Physics “LHC Physics”, St. Andrews, U.K.

**4/2005, 4/2006:** 4<sup>th</sup> & 5<sup>th</sup> School on Fusion Technology and Plasma Physics, Univ. of Thessaly, Department of Mechanical Engineering, Volos, Greece

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### Talks in conferences

- “Study of b-quark production at ATLAS”, Workshop on Recent Developments in High Energy Physics and Cosmology, Chios, Greece, 25–28/4/2013
- “Heavy flavour production at ATLAS”, Workshop on Recent Developments in High Energy Physics and Cosmology, Ioannina, Greece, 5–8/4/2012
- “B-physics studies with the ATLAS detector”, LHC on the march, IHEP-Protvino, Russia, 16–18/11/2011
- “Exclusive B-hadron decays in ATLAS”, Workshop on Recent Developments in High Energy Physics and Cosmology, Patras, Greece, 14–16/4/2011
- “Preparations for measurement of  $B^+$  production cross-section and lifetime in ATLAS with the first data”, Workshop on Recent Developments in High Energy Physics and Cosmology, Thessaloniki, Greece, 25–28/5/2010
- “Physics Monitoring with Z and  $J/\psi$  events”, Artemis RTN annual meeting, Pisa, Italy, 18–19/7/2009
- “ATLAS Offline Muon Data Quality Assessment”, Workshop on Recent Developments in High Energy Physics and Cosmology, Ancient Olympia, Greece 16–19/4/2008

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### Posters / proceedings

- “Measurement of the  $B^+$  meson production at high  $p_T$  with the ATLAS detector”, LHCC, 13/3/2013, CERN — ATL-PHYS-SLIDE-2013-131
- “B-physics studies with the ATLAS detector”, PoS(IHEP-LHC-2011)016
- “Exclusive B-hadron decays in proton-proton collisions”, LHCC, 23/3/2011, CERN — ATLAS-PHYS- SLIDE-2011-112
- “Preparation for precise measurements of rare muonic B-decays”, FCPC, 27/5–1/6/2009, Lake Placid, NY, USA — ATLAS-PHYS-SLIDE-2009-109

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### ATLAS notes / publications

- Measurement of the differential cross-section of  $B^\pm$  meson production in pp collisions at  $\sqrt{s} = 7$  TeV at ATLAS, JHEP 10 (2013) 042

- Measurement of ZZ production in pp collisions at  $\sqrt{s} = 7$  TeV and limits on anomalous ZZZ and ZZ $\gamma$  couplings with the ATLAS detector, JHEP 03 (2013) 128
- Measurement of the total ZZ production cross section in the four-lepton channel with 4.7 fb<sup>-1</sup> of ATLAS data, ATLAS-CONF-2012-026
- Observation of the B<sup>±</sup> meson in the decay B<sup>±</sup> → J/ψ(μ<sup>+</sup>μ<sup>-</sup>) K<sup>±</sup>, ATLAS-CONF-2010-09
- Muon Offline Monitoring at Tier-0 using cosmics and FDR data, ATLAS-MUON-INT-2011-002

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## Teaching experience

**2011–2012:** Supervision of three undergraduate theses on relevant topics (background studies in ZZ → 4ℓ, final state radiation in multi-lepton final states, Z+J/ψ production from multiple parton interactions).

**2010–2012:** Introductory courses to Linux, programming with C/C++ and ROOT, Aristotle Univ. of Thessaloniki.

**2008–2010:** Teaching assistant in courses of Atomic and Molecular Physics Laboratory, Nuclear Physics Laboratory and Advanced Subjects on Elementary Particles.

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## Outreach activities

**Talks:** “The contribution of A.U.Th. in the Experiment of the Century”, 19/1/2013, Noesis - Science Centre and Technology Museum, Thessaloniki, Greece.

**Lectures:** 3<sup>rd</sup> and 4<sup>th</sup> Physics Summer School for high-school students, Giannitsa, Greece.

**Guide:** “University open days”, 6–7/2012, Aristotle Univ. of Thessaloniki, Greece.

**Tutor:** Masterclasses (EPPOG) 2009–2012, Aristotle Univ. of Thessaloniki, Greece

**Organization of public event:** “All about...CERN”, 9/5/2009, Aristotle Univ. of Thessaloniki, Greece

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## Scholarships / fellowships

**2010–2013:** Greek State Research Fund “Herakleitus II” — Awarded research proposal

**2008–2010:** Artemis RTN - Marie Curie Actions

**2006–2008:** Greek State Research Fund — Awarded as highest ranking student in M.Sc. program “Computational Physics”

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## Foreign languages

**Greek:** Mother tongue

**English:** Excellent knowledge, Certificate of Proficiency in English (Univ. of Cambridge, Univ. of Michigan)

**French:** Good knowledge, speaking and writing.

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## Computing knowledge

- Object-oriented, structured and functional programming (C/C++, Python, bash)
- Programming frameworks (Mathematica, Matlab, Microsoft .NET)
- Data analysis packages (ROOT, Origin)
- Computer graphics (OpenGL)
- Word processing (LaTeX)
- Operating systems (Linux, MacOSX, Windows)