

# Eleni Vardoulaki

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## CONTACT INFORMATION

Argelander-Institut für Astronomie,  
University of Bonn, Auf dem Hugel 71, 53121, Bonn, Germany  
*email:* elenivard@gmail.com, elenin@astro.uni-bonn.de  
*tel:* +417663459424  
*website:* www.physics.uoc.gr/~eleniv/, radiogoals.physics.uoc.gr

## RESEARCH INTERESTS

Multi-wavelength studies of extragalactic radio sources; active galactic nuclei (AGN); quasars; (U)LIRGs; radio; optical imaging/spectroscopy; near-/mid-/far-IR imaging

## EDUCATION

**University of Oxford**, Oxford, UK

DPhil., Astrophysics, 2003-2009

- Thesis Title: Understanding the nature of the faint radio-source population
- Advisor: Prof Steve Rawlings
- Thesis Examiners: Prof Katherine Blundell & Prof Philip Best

**University of Ioannina**, Ioannina, Greece

BSc, Physics, 1998-2002

- Distinction - **Rank: 2nd**
- Grade - 7.66/10
- Major: Astrophysics
- Thesis title: Seyfert galaxies, Active Galactic nuclei and comparison to Normal galaxies' (using IRAS data)
- Thesis advisor: Prof. Vassiliki Tsikoudi

## PROFESSIONAL EXPERIENCE

**Argelander-Institut für Astronomie**, University of Bonn, Germany

*Postdoctoral Researcher*

**October 2015 to present**

**University of Crete**, Heraklion, Crete, Greece

*Postdoctoral Researcher: Radio continuum properties of (Ultra)-Luminous Infrared Galaxies*

**February 2012 to June 2015**

**California Institute of Technology (Caltech)**, Pasadena, CA, USA

*visiting Postdoctoral Researcher at the Infrared Processing and Analysis Center (IPAC)*

**May 2015**

**California Institute of Technology (Caltech)**, Pasadena, CA, USA

*visiting Postdoctoral Researcher at the Infrared Processing and Analysis Center (IPAC)*

**March-April 2013**

**Centro de Astrofísica da Universidade do Porto**, Porto, Portugal

*Research Fellow: Astrophysics of Active Galactic Nuclei*

**September 2010 to December 2011**

- Research on the stellar properties of the hosts of high-redshift active galactic nuclei

### **Observing**

- August 2006: WHT telescope, La Palma, Canary Islands, Spain (3 nights of observing)
- February 2006: Gemini, Hawaii, USA (observations held by resident astronomers)
- September 2005: McDonald observatory, Texas, USA (10 nights of observing and self-operating the telescope)
- February 2005: UKIRT telescope, Hawaii, USA (6 nights of observing)

### **Computing**

Linux/Mac/Windows Operating systems, Python, C, and Perl programming languages, Office applications, and HTML. Experience in astronomical data reduction using IRAF, AIPS, CASA and IDL packages. Data analysis at radio wavelengths (VLA), optical spectroscopy (William Herschel Telescope, 2.7m McDonald Obs., HST), infrared imaging (UKIRT, Spitzer/IRAC/MIPS, Herschel)

### **Internal examiner**

February 2011: Principal investigator in master thesis defence, University of Porto

### **Public outreach**

Interview on local TV channel regarding the solar eclipse of 2015

Complete study on the correct placement of a sundial in the city of Heraklion, Crete

Public talk for the 100 years of University of Porto (Winter 2011)

Public outreach for Oxford University, University of Porto and for the E-ELT (Summer 2010)

Author of article on Dark Matter, for a popular science portuguese newspaper

Telescope demonstrating for MacDonal Observatory (September 2005)

### **PUBLICATIONS**

Radio continuum properties of luminous infrared galaxies. Identifying the presence of an AGN in the radio, (**Vardoulaki, E.**; Charmandaris, V.; Murphy, E. J.; Diaz-Santos, T.; Armus, L.; Evans, A.; Mazzarella, J. M.; Privon, G. C.; Stierwalt, S.; Barcos-Munoz, L.), 2015, *A&A*, 574, 4

Black-hole masses, accretion rates and hot- and cold-mode accretion in radio galaxies at  $z \sim 1$ , (Fernandes, C. A. C.; Jarvis, M. J.; Martnez-Sansigre, A.; Rawlings, S.; Afonso, J.; Hardcastle, M. J.; Lacy, M.; Stevens, J. A.; **Vardoulaki, E.**), 2015, *MNRAS*, 447, 1184

Evidence for a maximum jet efficiency for the most powerful radio galaxies, (Fernandes, C. A. C.; Jarvis, M. J.; Rawlings, S.; Martnez-Sansigre, A.; Hatziminaoglou, E.; Lacy, M.; Page, M. J.; Stevens, J. A.; **Vardoulaki, E.**), 2011, *MNRAS*, 411, 1909

The TexOx-1000 redshift survey of radio sources I: the TOOT00 region, (**Vardoulaki, Eleni**; Rawlings, Steve; Hill, Gary J.; Mauch, Tom; Inskip, Katherine J.; Riley, Julia; Brand, Kate; Croft, Steve; Willott, Chris J.), 2010, MNRAS, 401, 1709

Radio imaging of the Subaru/XMM-Newton Deep Field - II. The 37 brightest radio sources, (**Vardoulaki, Eleni**; Rawlings, Steve; Simpson, Chris; Bonfield, David G.; Ivison, R. J.; Ibar, Eduardo), 2008, MNRAS, 387, 505

Accretion indicators for the 37 brightest radio sources in the Subaru/XMM-Newton Deep Field, (**Vardoulaki, E.**; Rawlings, S.; Simpson, C.), 2007, NCimB, 122, 1029

Probing accretion activity in radio sources using 24 micron Spitzer data, (**Vardoulaki, Eleni**; Rawlings, Steve; Simpson, Chris), Conference proceedings of "Galaxy Evolution with Spitzer and Herschel", Crete, May 2006

The First Swift X-Ray Flash: The Faint Afterglow of XRF 050215B, (Levan, A. J.; Osborne, J. P.; Tanvir, N. R.; Page, K. L.; Rol, E.; Zhang, B.; Goad, M. R.; O'Brien, P. T.; Priddey, R. S.; Bersier, D.; Burrows, D. N.; Chapman, R.; Fruchter, A. S.; Giommi, P.; Gehrels, N.; Hughes, M. A.; Pak, S.; Simpson, C.; Tagliaferri, G.; **Vardoulaki, E.**), 2006, ApJ, 648, 1132

The TOOT00 redshift survey of radio sources, (**Vardoulaki, E.**; Rawlings, S.; Hill, G. J.; Croft, S.; Brand, K.; Riley, J.; Willott, C.), 2006, AN, 327, 282

GRB 050215B: candidate afterglow, (Tanvir, N.; Pak, S.; Priddey, R.; Hughes, M.; Rol, E.; Levan, A.; O'Brien, P.; Simpson, C.; **Vardoulaki, E.**; Carroll, T.), 2005, GCN, 3031, 1

UNPUBLISHED  
WORK

Spatial variations in the mid-IR/radio correlation in Luminous Infrared Galaxies, (**Vardoulaki, E.**, Charmandaris, V., Murphy, E. J., Diaz-Santos, T., Armus, L., Appleton, P., and the GOALS Team), working paper

The stellar luminosities and radio structures of radio sources, (**Vardoulaki, E.**, Rawlings, S., Mauch, T., Hill, G. J., Simpson, C.), working paper

TEACHING  
EXPERIENCE

**Undergraduate Level**

**Trinity College, Oxford, UK**

*Non-Stipendiary Lecturer in Astrophysics and Atmospheric Physics* **2009**

- Tutoring 4th year students

**University College, Oxford, UK**

*Non-Stipendiary Lecturer in Astrophysics and Atmospheric Physics* **2009**

- Tutoring 4th year students

**The Queen's College, Oxford, UK**

*Non-Stipendiary Lecturer in Astrophysics and Atmospheric Physics* **2006**

- Tutoring of 4th year students

CONFERENCE PRESENTATIONS, SEMINARS AND SCHOOLS	The 12th Hellenic Astronomical Conference, Contribution: talk <i>Thessaloniki, Greece</i>	<b>June 2015</b>
	EWASS 2015, Contribution: talk <i>Tenerife, Spain</i>	<b>June 2015</b>
	Gas, Dust, and Star-Formation in Galaxies from the Local to Far Universe, Contribution: poster <i>Chania, Crete, Greece</i>	<b>May 2015</b>
	Multiwavelength-Surveys: Galaxy Formation and Evolution from the early universe to today, Contribution: poster <i>Dubrovnik, Croatia</i>	<b>May 2014</b>
	The 11th Hellenic Astronomical Conference, Contribution: poster <i>Athens, Greece</i>	<b>September 2013</b>
	A panchromatic view of galaxy evolution 30 years after IRAS, Contribution: talk <i>Cyprus</i>	<b>June 2013</b>
	The Modern Radio Universe 2013, Contribution: poster <i>Bonn, Germany</i>	<b>April 2013</b>
	Infrared and Submillimeter Probes of Gas in Galaxies: From the Milky Way to the Distant Universe, Contribution: poster <i>Pasadena, USA</i>	<b>March 2013</b>
	221st Meeting of the American Astronomical Society, Contribution: poster <i>Long Beach, USA</i>	<b>January 2013</b>
	Seminar at University of Crete <i>Heraklion, Greece</i>	<b>March 2012</b>
	The 10th Hellenic Astronomical Conference, Contribution: poster <i>Ioannina, Greece</i>	<b>September 2011</b>
	Seminar at the National Observatory of Athens, <i>Athens, Greece</i>	<b>April 2011</b>
	Seminar at CAUP <i>Porto, Portugal</i>	<b>April 2011</b>
	Public outreach talk for the 150 years of University of Porto, <i>Porto, Portugal</i>	<b>March 2011</b>
	Challenges in Infrared Extragalactic Astrophysics II, Contribution: poster <i>Agios Nikolaos, Greece</i>	<b>September 2010</b>
	Seminar at Princeton University, <i>New Jersey, USA</i>	<b>September 2010</b>
	Seminar at University of Oxford, <i>Oxford, UK</i>	<b>March 2010</b>
	Seminar at University of Cardiff, <i>Cardiff, UK</i>	<b>December 2007</b>

A century of Cosmology,  
 Contribution: poster  
*Venice, Italy* **August 2007**

The discovery of the Anisotropy of the Fossil Radiation of the Universe, by George F. Smoot, Nobel Prize of Physics 2006  
*Paris, France* **December 2006**

AstroGrid Science Workshope and RadioNet/Astro Grid workshop for radio data providers,  
*Oxford, UK* **December 2006**

Studying Galaxy Evolution with Spitzer and Herschel,  
*Agios Nikolaos, Greece* **May 2006**

Cosmology, galaxy formation and astro-particle physics on the pathway to the SKA,  
*Oxford, UK* **April 2006**

High Redshift Radio Galaxies,  
 Contribution: talk  
*Granada, Spain* **April 2005**

Seminar at University of Oxford,  
*Oxford, UK* **April 2005**

Ninth Synthesis Imaging Summer School,  
*New Mexico, USA* **June 2004**

Seminar at University of Oxford,  
*Oxford, UK* **May 2004**

Summer School on Physics, University of Crete  
*Heraklion, Greece* **June 2002**

Conference on Lasers and their applications, FORTH  
*Heraklion, Greece* **June 2001**

#### AWARDS

##### **General Secretariat for Research and Technology, Greece**

Post-Doctoral Research position supported by the Action "Supporting Postdoctoral Researchers" of the Operational Program "Education and Lifelong Learning" (Action's Beneficiary: General Secretariat for Research and Technology), and co-financed by the European Social Fund (ESF) and the Greek State, 2012-2015

##### **Centro de Astrofisica da Universidade do Porto (CAUP), Portugal**

Post-Doctoral Fellowship awarded by CAUP, 2010

##### **St. Peter's College, Oxford, UK**

Three travel grants awarded by St. Peter's College during DPhil studies

##### **State Scholarships Foundation IKY, Greece**

Award by the Greek scholarship foundation IKY for achieving 1st rank during the 3rd year of undergraduate studies, 2001

Award by the Greek scholarship foundation IKY for achieving 1st rank during the 1st year of undergraduate studies, 1999

## LANGUAGES

- Greek: Native speaker
- English: Fluent
- Portuguese: Basic
- French: Basic

## SPORTS AND ARTS/LEADERSHIP, PRESENTATION AND PERFORMANCE

- Organizer of dance team performances, specialized in salsa, and webmaster
- Performing art to an audience of 2000 people
- Sports captain in high-school

## REFERENCES

PROF VASSILIS CHARMANDARIS  
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California Institute of Technology  
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