

Curriculum Vitae

Dr. Georgios Vernardos

Personal Information

Name	Georgios (Giorgos) Vernardos
Nationality	Greek
Present address	Kapteyn Astronomical Institute, P.O. Box 800, 9700 AV Groningen, the Netherlands
email address	gvernard@astro.rug.nl
homepage	http://www.astro.rug.nl/~gvernard/
Languages	Greek, English, French, German, Spanish

Education

2011 – 2015	PhD conducted at the Centre for Astrophysics and Supercomputing at Swinburne University of Technology, Melbourne, Australia. Thesis title: “ <i>Data Intensive Quasar Microlensing</i> ”
2003 – 2008	Graduated in physics (4-year program), with theoretical physics orientation, Aristotle University of Thessaloniki, Thessaloniki, Greece Graduated with honors, or Excelent (grade : 8.6 / 10)
2000 – 2003	Innovative High School of Heraklion, Heraklion, Crete, Greece Final grade : 18.3 / 20

Awards

2013	The first student to be awarded computational time as Primary Investigator on the GPU-Supercomputer for Theoretical Astrophysics Research (gSTAR), a total of 81,000 CPU-core hours, via the Astronomy Supercomputer Time Allocation Committee (ASTAC)
2012	Awarded a total of 1,250,000 CPU-core hours on gSTAR, via ASTAC
2011 – 2015	Swinburne University Vice Chancellor's Research Scholarship and International Postgraduate Research Scholarship
2003 - 2004	Greek government grant, for being the student with the highest ranking after the first year of studies, Department of Physics, Aristotle University of Thessaloniki, Greece

Research experience

External Visits

- 2010/04 – 2010/06 European Centre for Theoretical Studies in Nuclear Physics and Related Areas Doctoral Training Programme : “Nuclear structure and nuclear astrophysics with radioactive ion beams”, Trento, Italy
- 2009/03 – 2010/03 Visiting researcher at Institut d'Astronomie et d'Astrophysique, Université Libre de Bruxelles working on the derivation of the equation of state in neutron star crusts and supernova cores
- 2008/11 Visiting researcher at Institut d'Astronomie et d'Astrophysique, Université Libre de Bruxelles working on nuclear fission models
- 2006/09 – 2007/03 Erasmus student at Institut d'Astronomie et d'Astrophysique, Université Libre de Bruxelles in order to complete the graduation thesis entitled : “Spallation nucleosynthesis in a bipolar supernova explosion”

Skills

- Experienced with CPU - GPU hybrid supercomputer clusters and large scale simulations
- Experienced with generating and working with TB-sized datasets
- Experienced with designing, setting up, and managing databases and web interfaces (e.g. <http://gerlumph.swin.edu.au>)
- Programming languages: C/C++, CUDA, PHP, Python, fortran, shell scripting (bash, c-shell), HTML/CSS, JavaScript, MySQL database programming, WebGL, IDL, latex

International schools and conferences

Oral presentations

- 2013/09 The 11th Hellenic Astronomical Conference, Athens, Greece
- 2013/09 “Black-hole (g)Astronomy – Exploring the different flavours of accretion”, Brindisi, Italy
- 2012/11 Short presentation at the XXIV Canary islands winter school of astrophysics, “Astrophysical applications of gravitational lensing”, Puerto de la Cruz, Tenerife, Spain
- 2012/03 Snowbird Workshop on Particle Astrophysics, Astronomy and Cosmology (SnowPAC2012), “Gravitational lensing in the age of survey science”, Snowbird, Utah, USA
- 2012/02 6th Theory Workshop of the Australian National Institute for Theoretical Astrophysics (ANITA), Monash University, Melbourne, Australia
- 2008/05 17th Hellenic Symposium on Nuclear Physics, University of Ioannina, Greece

Posters

- 2014/12 Australian Frontiers of Science 2014, Australian Academy of Sciences, Canberra, Australia
- 2013/07 Astronomical Society of Australia Annual Scientific Meeting, Melbourne, Victoria, Australia

- 2012/11 XXIV Canary islands winter school of astrophysics, “Astrophysical applications of gravitational lensing”, Puerto de la Cruz, Tenerife, Spain
- 2011/07 Astronomical Society of Australia Annual Scientific Meeting, Adelaide, SA, Australia

Seminars given

- 2015/01 Research School of Astronomy and Astrophysics, Australian National University, Canberra, Australia
- 2014/10 School of Physics: Astrophysics, Melbourne University, Melbourne, Australia
- 2014/06 Sydney Institute for Astrophysics, Sydney, Australia
- 2012/11 Department of Physics, University of Crete, Heraklion, Greece
- 2012/11 Department of Physics, Aristotle University of Thessaloniki, Thessaloniki, Greece

Outreach and teaching

Public outreach plays an important role in communicating ideas in astronomy. I accomplish this by giving public talks, seminars, astrotours and designing web pages.

- 2014 Tutoring “Introduction to eScience”, 1st semester, Faculty of Sciences Engineering and Technology, Swinburne University of Technology, Melbourne, Australia
- 2013 Tutoring “2nd semester Mathematics”, Faculty of Engineering, Swinburne University of Technology, Melbourne, Australia
- 2012 - present Swinburne Astronomy Online (SAO) project supervisor. Supervised a total of 15 MSc students on the following topics:
 - “*Ripples in the Cosmic Microwave Background*”
 - “*Human spaceflight*”
 - “*Standing on the shoulders of giants*”
- 2011 - present Astrotour guide at the Centre for Astrophysics and Supercomputing at Swinburne University of Technology, Melbourne, Australia. A total of 27 Astrotours (50-minute tours through the universe in 3D in Swinburne's Virtual Reality theatre) given for general public, scout groups, high-school and university students.
- 2005 Tutoring “Calculus 2”, 2nd semester, Department of Physics, Aristotle University of Thessaloniki, Thessaloniki, Greece

Service and leadership

- 2012/08 Swinburne Open-Day volunteer
- 2012/06 Guided a group of 3 work experience students through understanding modern astronomy topics and techniques, focused on gravitational lensing, Centre for Astrophysics and Supercomputing, Swinburne University of Technology, Melbourne, Australia
- 2012/06 Guide at the transit of Venus public event at Swinburne University of Technology,

Melbourne, Australia

- 2012/03 LOC member at the Keck Science meeting, Swinburne University of Technology,
Melbourne, Australia
- 2011/08 Swinburne Open-Day volunteer

External activities

- 2012 - present Volunteer at donation based restaurant “Lentil as anything”, Melbourne, Australia

References

Christopher J. Fuke Associate Professor
PhD advisor Centre for Astrophysics and Supercomputing,
Swinburne University of Technology,
Mail number H29, PO Box 218
Hawthorn, Victoria 3122, Australia

Email: cfluke@astro.swin.edu.au
Phone: +61 3 9214 5828
Personal Webpage: <http://astronomy.swin.edu.au/~cfluke/>

Darren Croton Associate Professor
PhD co-advisor Centre for Astrophysics and Supercomputing,
Swinburne University of Technology,
Mail number H29, PO Box 218
Hawthorn, Victoria 3122, Australia

Email: dcroton@astro.swin.edu.au
Phone: +61 3 9214 5537
Personal Webpage: <http://astronomy.swin.edu.au/~dcroton/>

Nikolaos Stergioulas Associate Professor
Professor Department of Physics,
Aristotle University of Thessaloniki,
54124 Thessaloniki, Greece

Email: niksterg@auth.gr
Phone: +30 2310998233
Personal Webpage: <http://www.astro.auth.gr/~niksterg/>